minnesota power / 30 west superior street / duluth, minnesota 55802-2093 / 218-722-5642 / www.mnpower.com

Lori Hoyum
Policy Manager
218-355-3601
lhoyum@mnpower.com

April 1, 2013

VIA E-FILING
Dr. Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Re: 2013 Safety, Reliability and Service Quality
Standards Report Docket No. E015/M-13-___

Dear Dr. Haar:

Minnesota Power hereby submits, via electronic filing, its 2013 Safety, Reliability and Service Quality Standards Report as required by Minn. Rules 7826.0100-2000 and Docket No. E015/M-11-292.

Please contact me at the number above if you have any questions regarding this filing.

Yours truly,

Lori Hoyum

Attachment
cc: Service List

Before The
Minnesota Public Utilities Commission

Docket No. E-999/R-01-1671

Minnesota Power's
Safety, Reliability
and
Service Quality Standards Report
under
Minn. Rule 7826

April 1, 2013

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's 2013 Annual Report Concerning Safety, Reliability, Service Quality, And Proposed Annual Reliability Standards

Docket No. E015/M-13-___

Minnesota Power submits this Report to the Minnesota Public Utilities Commission ("Commission") pursuant to Minn. Rules, Chapter 7826 and in compliance with the Commission's Order dated December 20, 2012 in Docket No. E015/M-12-308. Through this Report, Minnesota Power provides the Commission, Department of Commerce-Division of Energy Resources ("Department") and other stakeholders, information detailing the Company's efforts and commitment to provide safe, reliable and cost effective electric service to its unique customer base.

Minnesota Power serves approximately 143,000 retail electric customers and 16 municipal systems across a 26,000-square-mile service area in central and northeastern Minnesota. Residential customers comprise less than 10 percent of the utility's total annual delivery. More than half of Minnesota Power's total energy supply is sold to industrial customers who operate around the clock. This ratio of industrial demand gives Minnesota Power a uniquely high load factor and a load profile with less variation than most utilities. These conditions contribute to Minnesota Power's comparatively low cost electricity. Minnesota Power is expected to remain a winter-peaking utility for the foreseeable future, as residential customers do not have the influence on overall demand seen with summer peaking utilities.

Minnesota Power balances its reliability goals against the need to leverage capital investments while efficiently managing its operating expenses. Minnesota Power believes that system reliability metrics are best compared over multiple years to identify statistically relevant trends. Minnesota Power's 2012 reliability statistics are very similar to 2011 results. The 2012 storm excluded results for System Average Interruption Duration Indice ("SAIDI") and System Average Interruption Frequency Indice ("SAIFI") were 89.75 and 0.93. In 2011 the comparable

results were 90.59 and 0.92. These results exceed the 2012 SAIDI goal of 97.69 as well as the 2012 SAIFI goal of 1.02. These SAIDI and SAIFI numbers are favorable considering increased incidents of trouble on the system from 3,347 in 2011 to 3,551 in 2012.

Minnesota Power provides tables, graphs and maps within this Report of reliability statistics as well as charts demonstrating factors impacting system reliability. The graphs in this Report depict the relationship between operational and financial data. The maps, while showing the consistency of the system and easily displaying outlying performance, will become most valuable when a history of maps have been collected and comparisons can be made. The first set of maps was provided in Minnesota Power's 2011 Report; therefore the Company does not yet feel there is sufficient data with which to draw conclusions.

REPORTING REQUIREMENTS

Minnesota Power's policies and procedures ensure pro-active management of its electrical system. Minnesota Power employs several methods to maintain reliability and provide active contingency planning. The primary methods used are discussed in detail below:

PLANNING PROCESS

Minnesota Power uses a planning horizon of ten years to optimize the use of its time, labor and capital. This planning process results in investments in the following six categories.

- CUSTOMER EXTENSIONS - Extension of service to new customers. This fulfills its obligation to serve and grows customer base.
- SYSTEM IMPROVEMENTS - System improvements are the accumulation of all the projects completed to keep the system in compliance with regulations and codes. Issues which are addressed include, but are not limited to: system capacity, voltage performance and power quality.
- AGE RELATED REPLACEMENTS - These are end-of-life replacement projects. This equipment is still in service, but may be jeopardized by ice accumulations, high winds or additional decay.
- BULK SUBSTATION IMPROVEMENTS – Capital is spent on building or replacing distribution substations. Most often spent to create or upgrade substations to meet capacity needs.

- GOVERNMENT MANDATED RELOCATIONS - These are projects done to comply with government requests. Most often these projects are system relocations due to road construction which require vacation of or relocation in a road right of way.
- FACILITY/SUPPORT PROJECTS - These are projects which are necessary to the operation of the electrical system, but are not used for the generation, transmission or distribution of electricity. They are typically facility projects, and often pertain to the upkeep of service buildings and properties.

Contained in Minnesota Power's ten-year plan are projects identified and developed for the purpose of maintaining and improving the overall system. It is the Company's construction roadmap and is written to not only address specific problems, but to also increase overall system performance. It is important to understand that this ten year plan may be modified to meet customer or business needs. Because it serves as a roadmap, the plan details are reviewed frequently and are modified, if necessary, to reflect the needs of customers, government agencies or Minnesota Power's business needs.

VEGETATION MANAGEMENT PROGRAM

System reliability can be adversely impacted by many external environmental factors. One of the more significant factors that affect the Company's system is vegetation encroachments. A coordinated and systematic vegetation management program is a key component of Minnesota Power's distribution reliability effort. Minnesota Power has designed a vegetation management program to address each distribution line approximately every five years and transmission lines every seven years. Vegetation management benefits the system in various ways.

- Reduces momentaries and outages due to vegetation contact
- Improves system performance by reducing wildlife issues
- Improves restoration as circuits are easier to access

In 2011, Minnesota Power entered into six-year contracts for vegetation management for both its transmission and distribution lines. This long term commitment maintains levels of vegetation management consistent with utility best practices while reducing costs. A substantial cost savings was realized in 2012 compared to previous years as a result of the long term contracts. This savings is depicted in the "Vegetation Budget vs. Vegetation Spend" chart on Page 18.

LINE INSPECTION PROGRAM

Minnesota Power's line inspection program requires each pole be inspected every ten years. Poles that are 20 years and older are bored and checked internally. Depending on what is found during the pole inspection, one of four following actions is taken:

1) Poles found to be compliant with inspection criteria are identified as needing no work pending the next ten year inspection; or
2) If inspection reveals a physical loss of strength at the ground line, but an otherwise good pole, a metal brace called a pole stub is applied; or
3) If insects or decay within the pole are found and treatable, action is taken to stop further effects from the insect or decay; or
4) If the pole is beyond treatment or stubbing, it is replaced.

Besides poles, line inspectors also inspect attachments to the pole, as well as ground mounted equipment looking for potential problems. The line inspectors are given contact information that allows them to resolve issues requiring immediate response in the field.

IMPROVED CUSTOMER COMMUNICATION

Minnesota Power uses an Interactive Voice Response ("IVR") unit as a means of improving communication with customers during an outage. The IVR is a telephone system that is able to interact with customers. The system has the intelligence to read the phone number of the incoming caller. If the number is in the Customer Information System ("CIS"), the IVR will look to the Outage Management System[1] ("OMS") to see if the caller is in an area affected by an outage. If the caller is part of a known outage, the system reports back that they are part of a known outage and that crews have been dispatched. If the information is available, the system will also communicate estimated restoration time. This provides Minnesota Power the capabilities of letting each caller know what problem is affecting their area as well as give them an estimate of the outage length. The IVR has eased congestion during periods of multiple or widespread outages.

Minnesota Power is also using the IVR to communicate information to the OMS. The Company installed a General Electric *PowerOn* OMS in late 2006. This system gives a real time look at the distribution system by tying incoming IVR data, information from the field, data from

[1] A computer system used by operators of electric distribution systems to assist in restoration of power.

Minnesota Power's Energy Management System[2] ("EMS") and the Geographic Information System[3] ("GIS") together. With data from these sources, the OMS is able to predict the location of the problem. Based on that information, the OMS predicts what customers are without power. Once the problem is confirmed in the field, actual conditions are modeled in the OMS and the exact customers affected by the outage are identified. This method of outage detection makes identifying outages more reliant on real time data, and therefore, more efficient.

For the last several years, Minnesota Power has been deploying voltage monitors on circuits that had historically been challenging to supervise. These monitors were put in place to allow real time checks of feeder voltage and also to report momentary operations. The installed equipment is produced by a company named Telemetrics. In 2011, the Company completed testing to prove that Telemetric data could be brought into the EMS, which ultimately brings the data to the OMS, giving dispatchers a more complete picture of conditions in the field. This remains a promising development for the future.

Minnesota Power unveiled a website based Outage Center in 2010 which facilitates the reporting and display of outage information. The Outage Center provides visitors with specific outage locations and also allows them to report outages or check the status of outages online. The Outage Center augments the IVR unit and obtains information directly from the OMS. Extensive precautions have been taken to ensure that customer information is not compromised. Great care was also taken in creating a map detailed enough for a customer to be able to recognize an event in their area without giving the exact location of the problem. In 2011, Minnesota Power introduced applications to allow customers to view the Outage Center on their Android, Blackberry and iPhone devices. Customers are able to now report outages as well as check on the status of outages from anywhere at any time.

Minnesota Power has experienced a significant reduction in the number of residential complaint calls recorded, as is depicted in the "Residential and Commercial Complaints" chart on Page 21. The Company cannot point directly to one circumstance that would have caused this

[2]A system of computer-aided tools used by operators of electric utility grids to monitor, control, and optimize the performance of the generation and/or transmission system. The monitor and control functions are known as System Control and Data Acquisition; the optimization packages are often referred to as "advanced applications".

[3] A system designed to capture, store, manipulate, analyze, manage, and present all types of geographically referenced data.

decrease in complaints. However, projects such as the Outage Center, OMS integration, and others addressed in this Report, are believed to be contributing factors.

SMART GRID PROJECTS

As part of a comprehensive Smart Grid upgrade plan, Minnesota Power has completed design and implementation of both a Meter Data Warehouse ("MDW") and OMS integration as part of its Department of Energy American Recovery and Reinvestment Act ("ARRA") Smart Grid Investment Grant ("SGIG") Advanced Metering Infrastructure ("AMI") Project. The creation of the MDW has allowed for a central repository for all AMI data as part of the SGIG project, integrating the metering AMI data in the same data historian as the rest of company operational data. This has allowed a central repository for multiple uses of the AMI data, including some distribution operational data such as loading information. Minnesota Power designed this warehouse based on common standards in order to allow for future secure interfaces by third-party systems. The OMS integration allows for real-time tracking and verification of customer outages based on messaging coming from metering endpoints in the field. These projects and other smart grid related projects, which focus on improvements in the areas of reliability and customer service, are discussed in greater detail in Minnesota Power's 2013 Smart Grid Report to be filed under Docket No. E999/CI-08-948 (and is included with this Report as Attachment A).

Minnesota Power is a participant in the Midwest Independent Transmission System Operator ("MISO") Synchrophasor Project. MISO was awarded a SGIG to install Phasor Measurement Units ("PMUs") across its footprint. The PMUs will provide high speed data that can be used, in part, to verify the computer simulation models that are used to plan and operate the system today. As application software matures along with the rollout of these devices across the Eastern Interconnection[4], there is potential to operate the system based on data collected from the synchrophasor devices. To date, Minnesota Power has installed three PMU's and one Phasor Data concentrator ("PDC"). The PDC compiles all the PMU data from Minnesota Power and sends it to MISO in one data stream. All equipment is currently operational and providing high speed measurement information to MISO and critical locations throughout the Transmission system.

[4] All of the electric utilities in the Eastern Interconnection are electrically tied together during normal system conditions and operate at a synchronized frequency operating at an average of 60Hz. The Eastern Interconnection reaches from Central Canada Eastward to the Atlantic coast (excluding Québec), South to Florida, and back West to the foot of the Rockies (excluding most of Texas).

It is important to note that for more than 35 years, Minnesota Power has been making strategic investments into infrastructure and technologies to improve both the transmission and distribution systems that make up its grid. At times, Minnesota Power has taken a leadership role in the country with regard to these investments, such as the investment in one of the first utility-owned fiber optic links in the country, which has subsequently led to the installation of hundreds of miles of fiberoptic cable.

SYSTEM CONSTRUCTION AND ANIMAL PROTECTION

In densely populated areas, loops and ties are used to help shorten restoration times. When a system is looped, two paths are created to each service point. Generally speaking, both of those paths are from the same source, but restoration is shorter as a secondary path can be used while the primary path is repaired. The same is true of ties. Generally, a tie is created by joining two different circuits. This, too, gives electricity the capability to flow to a customer on one of two (or more) different paths. This makes restoration faster and easier as customers can be served from an alternate part of the system while repairs are made on the primary system.

Currently, isolating problems and connecting alternate feeds is done manually. As part of Minnesota Power's SGIG pilot project, the Company has instituted a system to isolate and refeed affected customers automatically. The concept behind this is that this automation will reduce large blocks of outage time on sections of a circuit not directly affected by an issue on the system. To date, the system has operated one time. If improvement in reliability on this circuit is substantial due to the automation, further application of the technology will be considered.

Efforts are underway to reduce animal contact with energized equipment. Wildlife protectors have been available for years. In years past, when animal protection was put on electrical equipment it quickly resolved issues caused by wildlife. Unfortunately, in time, the inside of the wildlife protectors would become contaminated which in turn would cause flashovers and outages would return. These flashovers were difficult to find as they generally happened on the inside of the wildlife protection and were not visible. Issues were also created by the wildlife protection devices contributing to overheating of equipment. Over the last several years, however, wildlife protection devices have changed. New designs in wildlife protection devices are effective in controlling wildlife, may be installed without customer outages,

eliminate contamination and do not cause overheating problems. The new devices are more expensive than equipment previously used, but preliminary indications suggest that they are capable of animal protection without the side effects of contamination and overheating.

NERC FACILITIES ALERT

On June 18, 2007 the Federal Energy Regulatory Commission ("FERC") granted the North American Electric Reliability Corporation ("NERC") the legal authority to enforce reliability standards with all users, owners, and operators of the bulk power system in the United States, and made compliance with those standards mandatory and enforceable with penalties.

NERC's role includes discovering, identifying, and providing information that is critical to ensuring the reliability of the bulk power system in North America. In order to effectively disseminate this information, NERC utilizes e-mail based "alerts" designed to provide concise, actionable information to the electricity industry. As defined in its Rules of Procedure, the NERC alerts are divided into three distinct levels as follows:

- Industry Advisory- Purely informational intended to alert registered entities to issues or potential problems. A response to NERC is not necessary.
- Recommendation to Industry- Recommended specific action be taken by registered entities. Requires a response from recipients as defined in the alert.
- Essential Action- Identify actions deemed to be "essential" to bulk power system reliability. Requires NERC Board of Trustees approval prior to issuance. Similar to recommendations, essential actions also require recipients to respond as defined in the alert.

On October 7, 2010, NERC issued a Recommendation to Industry for Consideration of Actual Field Conditions in Determination of Facility Ratings ("Recommendation"). Recipients of this Recommendation were to review the current Facility Ratings Methodology for their transmission lines to verify that the methodology used to determine facility ratings is based on actual field conditions. Line ratings depend on many limiting factors, including transmission facility placement, tower height, topographical profiles, and maintaining adequate conductor clearances (i.e., conductor-to-ground, conductor-to-conductor) under a variety of ambient weather and loading conditions.

Entities were to describe plans to complete an assessment, due to NERC by December 15, 2010, of their facilities to verify whether the actual field conditions conform to the entity's design tolerances in accordance with its Facility Ratings Methodology and to describe how and when all transmission lines will be assessed.

Within six months of the date of this Recommendation, each registered entity was to have identified and reported all transmission facilities where an entity determined that the existing conditions were different than the design condition of the facilities and what those differences were to the applicable Reliability Coordinators and Regional Entities. The Midwest Reliability Organization ("MRO") is the Regional Entity for Minnesota Power and other Minnesota utilities. Lastly, the registered entity was to correct any issues identified in its assessment as expeditiously as possible, but no later than 24 months following the date of the Recommendation, or October 7, 2012. The NERC rapidly reconsidered the complexity of this task and modified the timeline for identification of facilities for which actual conditions may impact line ratings. Discrepancies for the highest-priority facilities with regard to bulk power system reliability were to be identified and reported to the applicable Regional Entity no later than December 31, 2011, medium priority facilities no later than December 31, 2012 and lowest priority facilities no later than December 31, 2013.

Minnesota Power's 2012 progress on the NERC Facility Ratings Alert evaluation consisted primarily of building and analyzing PLS-CADD[5] models for each of the "medium" priority lines. Minnesota Power's medium priority lines include the 230 kV system and the +/- 250 kV high voltage direct current line which equal a total of 21 circuits and approximately 1,100 miles of transmission lines. PLS-CADD models were developed based on high-precision LiDAR[6] survey data acquired for each of the lines. The models were then meticulously analyzed to identify discrepancies. All discrepancies were reported to the NERC in January 2013. Also in early 2013, many of Minnesota Power's 230 kV lines were de-rated (operational capacity was reduced) as part of the Company's plan for reducing the overall number of discrepancies requiring costly physical mitigation. Engineering is ongoing for the remaining discrepancies.

[5] Power Line Systems - Computer Aided Design and Drafting – an overhead power line design program
[6] LiDAR ("Light Detection and Ranging") is an active remote sensing technology that uses laser light to detect and measure surface features on the earth.

EMERGENCY PREPAREDNESS AND MUTUAL AID

Mutual aid is the cooperation between utilities to provide labor and vehicles to a utility so profoundly affected by outages that it is unlikely they will have the ability to restore power to all of their customers within four to seven days. A robust protocol has been developed between the Midwest Mutual Aid member utilities. Generally a utility calls upon Mutual Aid when they face a week or more of outage times and multiple weeks of restoration work. To begin the process, Mutual Aid member representatives are contacted via e-mail, text message and finally a call by an interactive voice response unit. Each company has a minimum of two (and most have three) Mutual Aid representatives so attendance by each utility on the conference call is virtually guaranteed. At the beginning of a Mutual Aid call, the moderator references a spreadsheet with all of the utility names and their representatives. (Attachment B). The moderator will work utility by utility obtaining and recording system status, utility needs and utility resources. After all of the utilities have reported, the most effective response coordination is formulated and finalized.

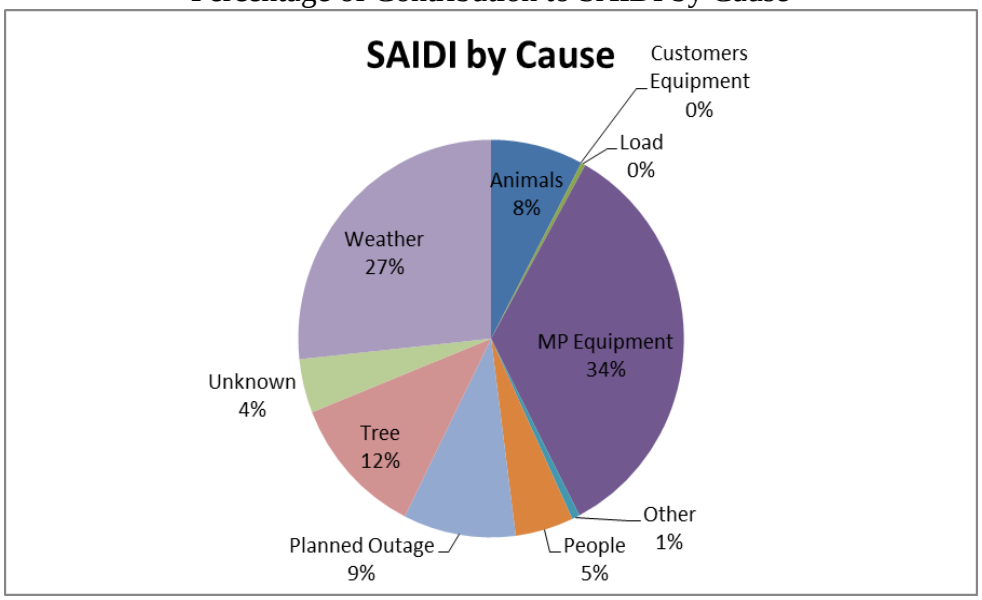
The Mutual Aid effort is done at cost for the affected utility. Minnesota Power is a proud member of the Midwest Mutual Aid group and responded to several requests for mutual aid in 2012. Minnesota Power has responded to requests for Mutual Aid in cities as close as Grand Rapids, Minnesota and in 2012 traveled to the east coast to assist those affected by Hurricane Sandy. In the event of a major catastrophe[7] within its service territory, Minnesota Power is confident industry assistance is only a conference call away.

RELIABILITY COST MATRIX

Minnesota Power has provided summary information to assist stakeholders in understanding the Company's overall system reliability and the main factors that affect reliability. The Company continues to search for models of matrices used by other utilities that will convey an informative assessment of the main factors that affect reliability. The graphs and charts below show the contributing factors to SAIDI and SAIFI and the relationship between operational performance and cost. The Company strives to provide this valuable data and information in an easy to understand format.

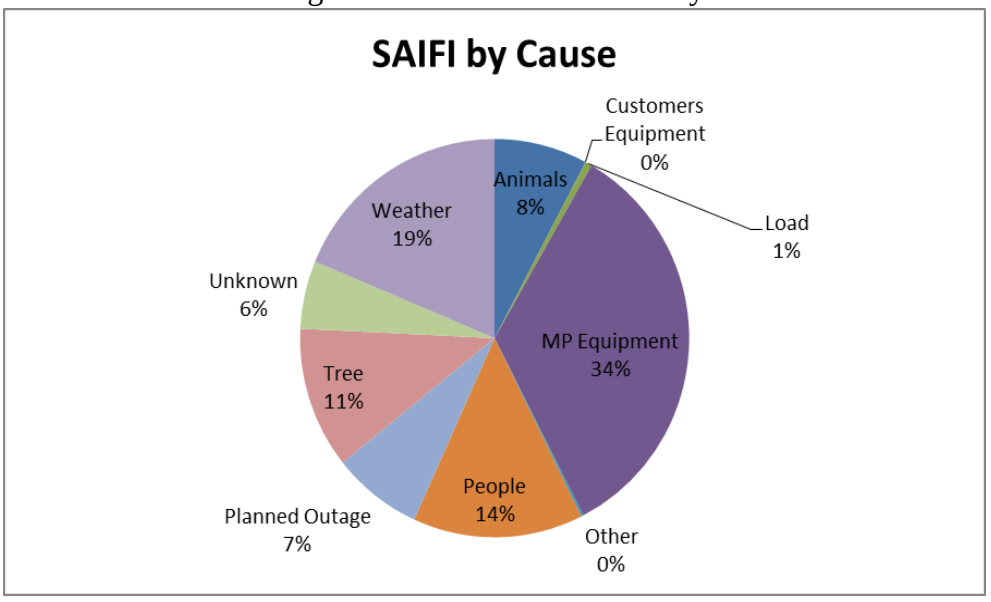
[7] Minnesota Power did not experience significant enough outages to require Mutual Aid within its service territory as a result of the June 2012 flooding.

Percentage of Contribution to SAIDI by Cause

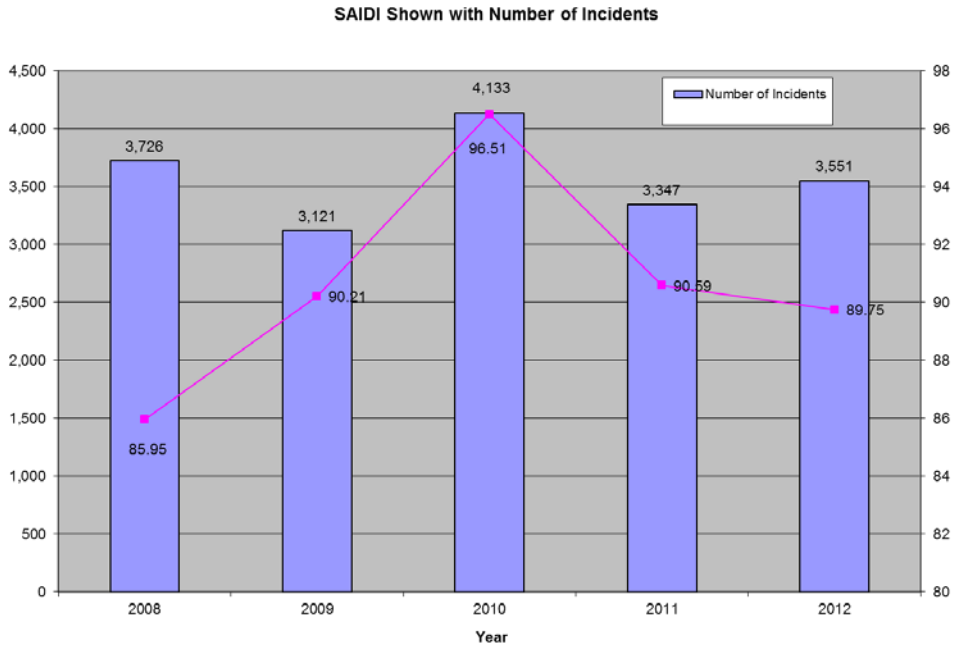


This chart shows the percentage of Company SAIDI reported by each of the identified causes.

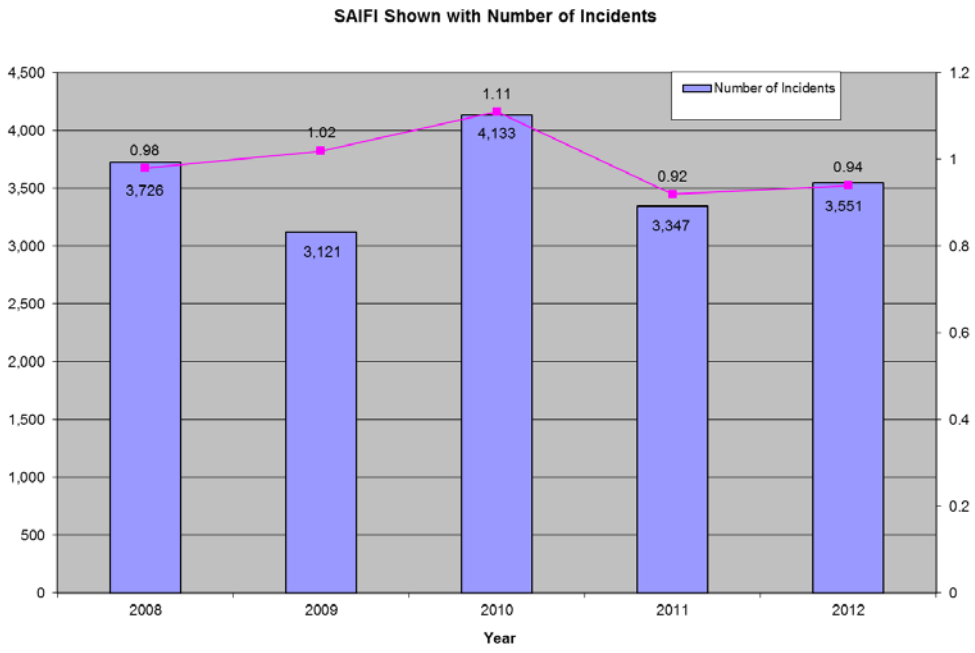
Percentage of Contribution to SAIFI by Cause



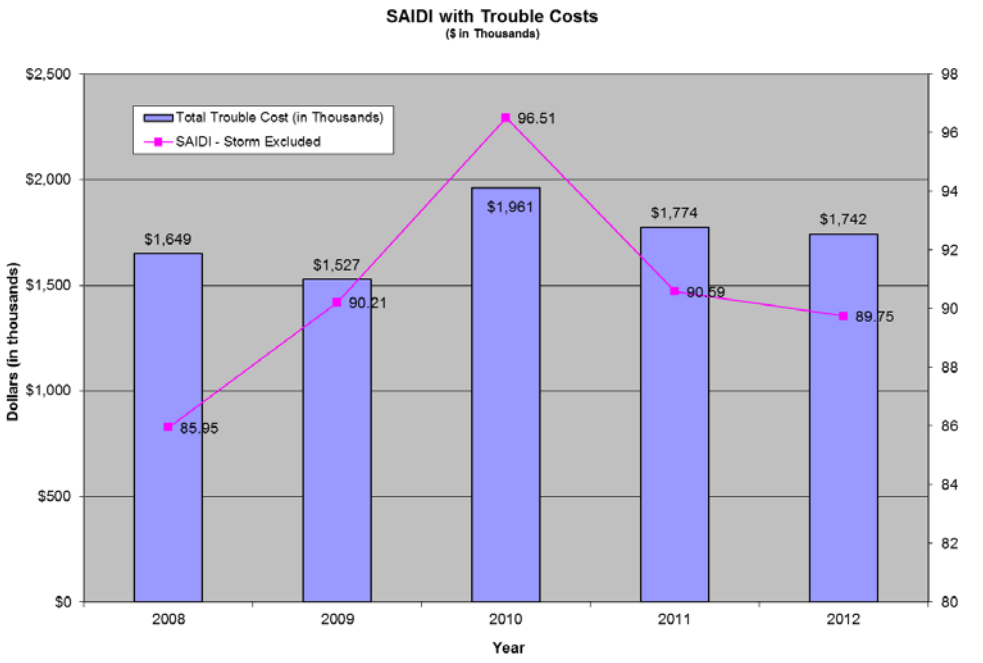
This chart shows the percentage of Company SAIFI reported by each of the identified causes.



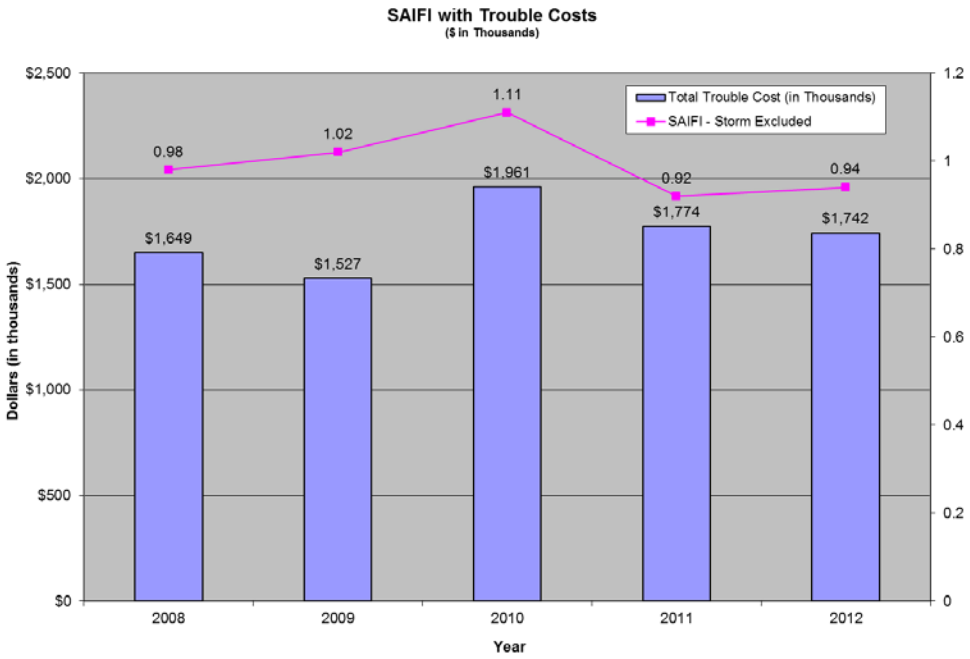
This chart presents the history of SAIDI against Minnesota Power's historic number of incidents.



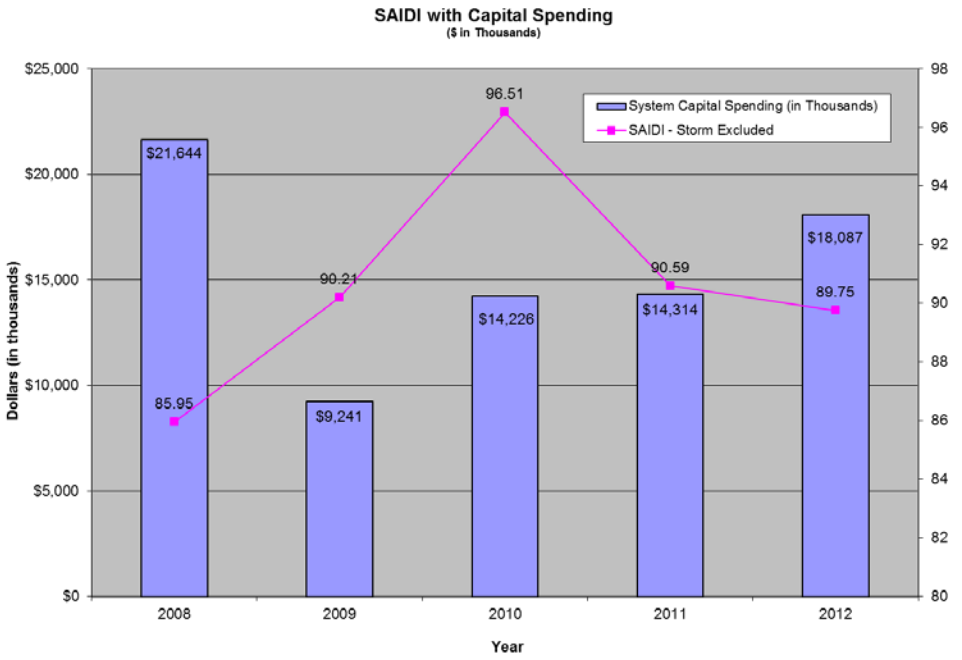
This chart presents the history of SAIFI against Minnesota Power's historic number of incidents.



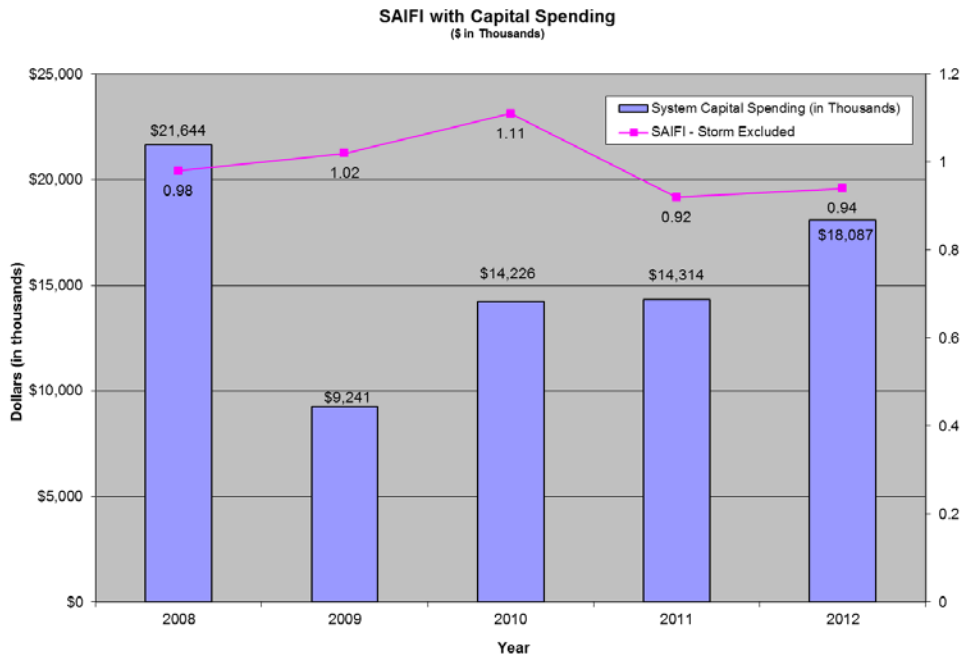
This chart shows historic SAIDI with operation & maintenance dollars spent on trouble calls. (This is unplanned work done without the replacement of capital assets.)



This chart shows historic SAIFI with operation & maintenance dollars spent on trouble calls. (This is unplanned work done without the replacement of capital assets.)



This chart shows historic SAIDI with capital dollars spent on system maintenance and upgrade. (This is generally planned work done to address revenue, system improvements, age related replacements, bulk substation improvements, government mandates and other projects.)



This chart shows historic SAIFI with capital dollars spent on system maintenance and upgrade. (This is generally planned work done to address the six catergories presented at the beginning of this section.)

POWER QUALITY

Minnesota Power resolves power quality issues on a case by case basis. When a customer calls with a complaint or questions regarding a power quality issue, Minnesota Power investigates and resolves all problems caused by the Company. In the event of complaints regarding low voltage or high voltage, Minnesota Power will do an investigation of the customer's service and check for loose or overheated connections. If no problem is found or if the problem is intermittent, the Company will install a recording voltmeter. This meter allows for monitoring of the voltage over time and under various customer and system loading conditions. If those recordings demonstrate that the Company is not meeting its prescribed voltage standards, Minnesota Power performs the required maintenance in order to bring the voltage within the limits stated in its Distribution Standards. There are seldom requests from customers for power quality studies. The Company has observed that customers seem to experience fewer power quality issues than in the past. This is most likely due to more robust electronics and the widespread use of battery back-up options.

As mentioned on page 4, in 2006, Minnesota Power began a pilot program to install voltage/outage monitoring equipment on primary lines not monitored by its EMS. These were normally lower voltage rural systems served by substations without communications infrastructure. The pilot has grown over the past several years to include other applications including customer sites and some lines that had limited EMS data points. The Company has over 150 monitors active at this time. Minnesota Power is partnered with Sensus-Telemetric and utilizes their monitors that are communicating through a public cellular network (TCP/IP). Sensus-Telemetric hosts the web site where the information is made available to build reports and set up alarms (email messages). Minnesota Power has completed an evaluation to provide TVM-3 alarms to its dispatchers through an interface with the OMS. Sensus Distribution Automation TVM voltage monitors measure line voltage and provide real-time notifications of steady state values, outages and under or over voltage conditions. The TVM-3 provides outage information more rapidly than customer calls. It also confirms when service is restored. When dispatchers get crews to accurate locations more quickly, outage restoration times can be reduced. Improved monitoring of voltages also helps the Company determine the overall condition of the system.

MAIFI

The Momentary Average Interruption Frequency Index ("MAIFI") index provides a measure of the average number of short outages, an interruption of electrical service that Minnesota Power defines as lasting less than five minutes that an average customer experiences in a year. While Minnesota Power has tracked MAIFI statistics for the last decade, it has done so with the knowledge that the Company's MAIFI data collection is and will be incomplete without a significant investment in the technology necessary to collect and report all momentary outages. Increased accuracy in the MAIFI index will occur as incident tracking technologies continue to develop and their cost of implementation versus the benefit attained makes sense for customers. Unfortunately, as the capability to collect momentary information improves, the performance of the statistic will appear to degrade.

Momentary outage data is collected a few ways. About 30 percent of Minnesota Power's systems report through SCADA[8]. The remaining data is collected manually. Some is collected to satisfy a request, and some is collected when device maintenance is done. The rest is collected in the OMS from customer phone calls reporting a brief interruption. The data collected for 2012 has been provided in the summary table on Page 20.

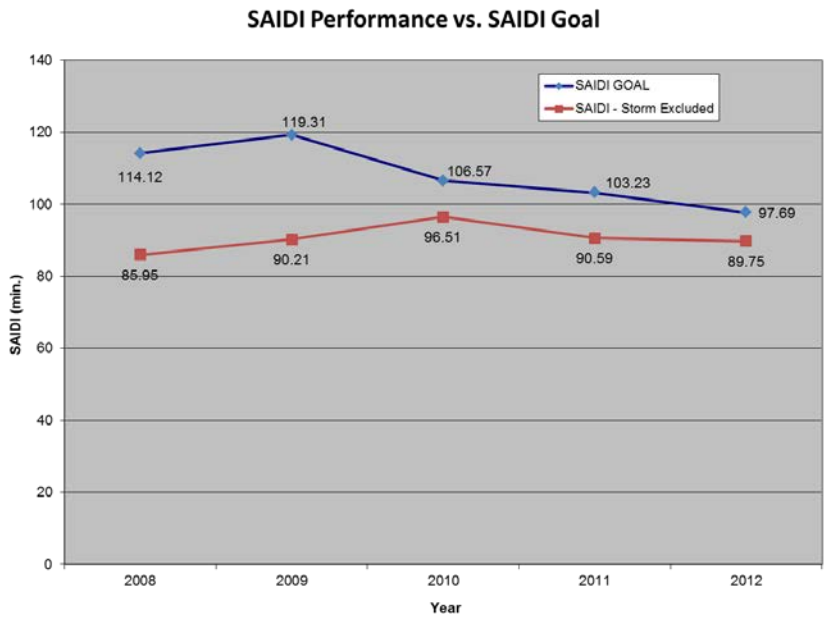
[8] Supervisory Control and Data Acquisition "SCADA" A system of remote control and telemetry used to monitor and control the electrical system.

MINNESOTA POWER 2012 SUMMARY GRAPH AND SYSTEM MAPS

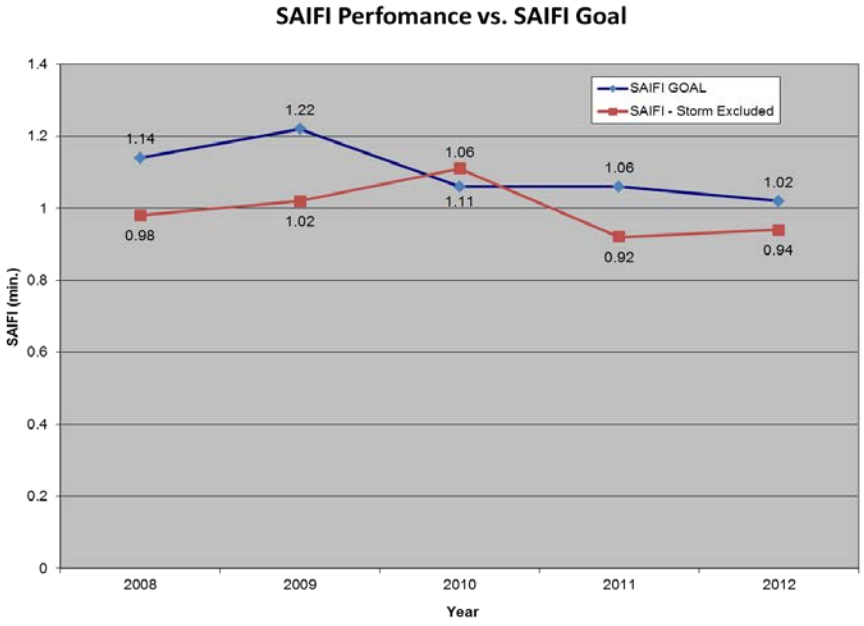
Minnesota Power is committed to maintaining safe, reliable and cost effective electricity service. These issues are important to all of its customers to varying degrees. Minnesota Power strives to provide the quality of service customers require. Further details on 2012 performance results are contained in the remaining pages of this report beginning with graphs of the safety, reliability and service quality issues which impact Minnesota Power's customer base. Each graph contains a brief explanation of the indices. The graphs shown are:

- SAIDI Performance vs. SAIDI Goal
- SAIFI Performance vs. SAIFI Goal
- 5 yr. Historic SAIDI and SAIFI
- 5 yr. Historic CAIDI Values
- MAIFI – Momentary Average Interruption Frequency Indices
- Vegetation Budget vs. Vegetation Spend
- Percentage of Calls Answered in 20 Seconds
- Customer Complaints
- Number of Lineworkers Available for Trouble Calls

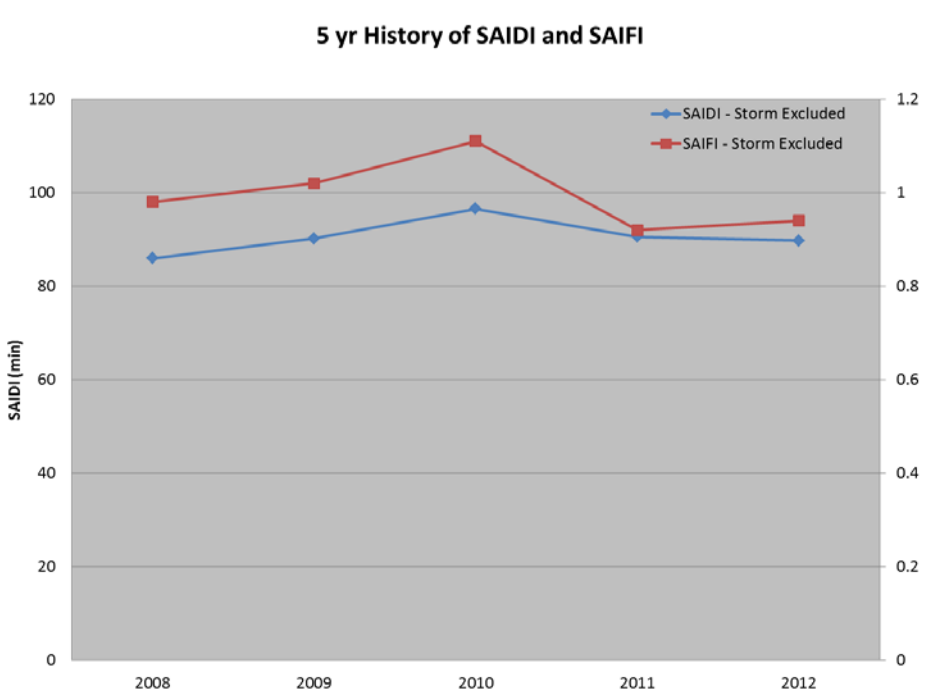
Current year details of this data are available within the full 2012 Report. Previous year details are available in their respective Reports.



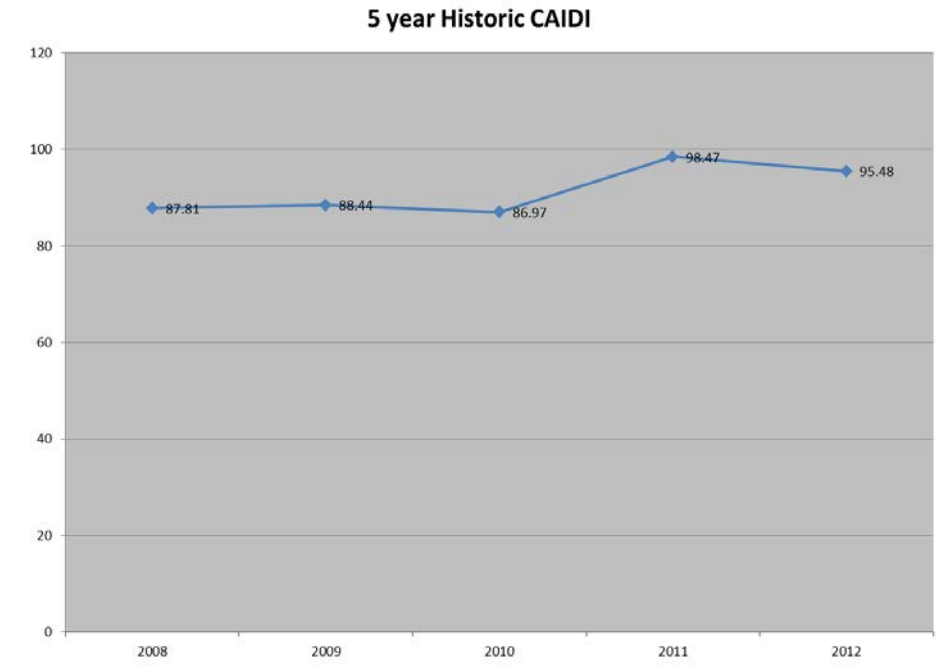
SAIDI is the System Average Interruption Duration Indice. SAIDI provides the duration, in minutes, of the average time customers are interrupted.



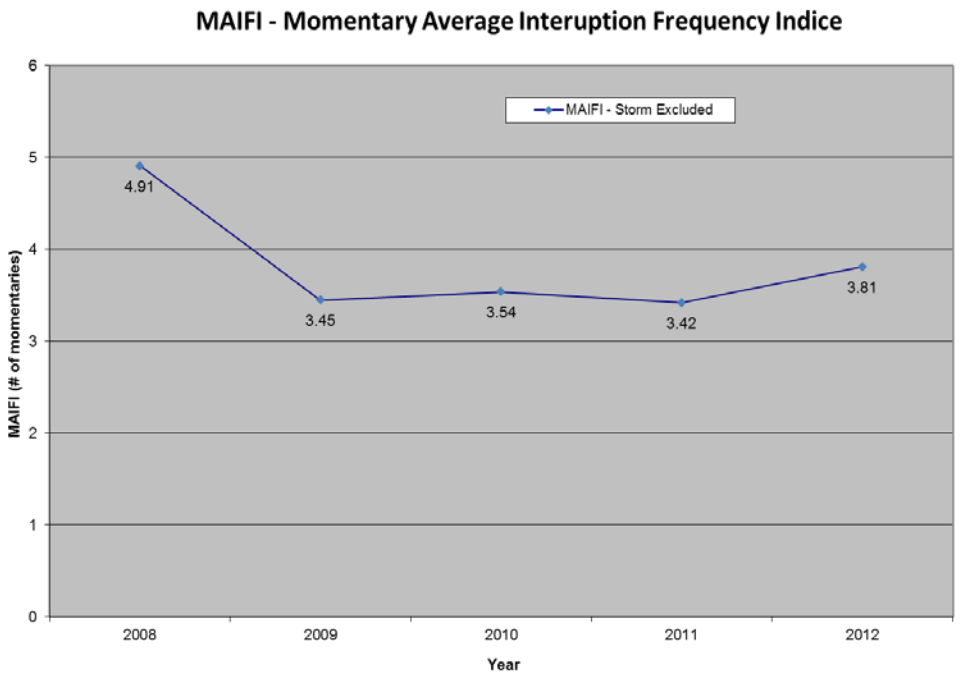
SAIFI is the System Average Interruption Frequency Indice. SAIFI provides the frequency of sustained (over five minutes) outages experienced by the average customer.



SAIFI is an indication of how many outages an average customer experiences and SAIDI is an indication of how long the average customer is without power. These numbers have been difficult to accurately track through history. The difficulty resides in the iterative process of collecting and reporting data. While the system is improving, the accuracy of the data being collected is also improving.

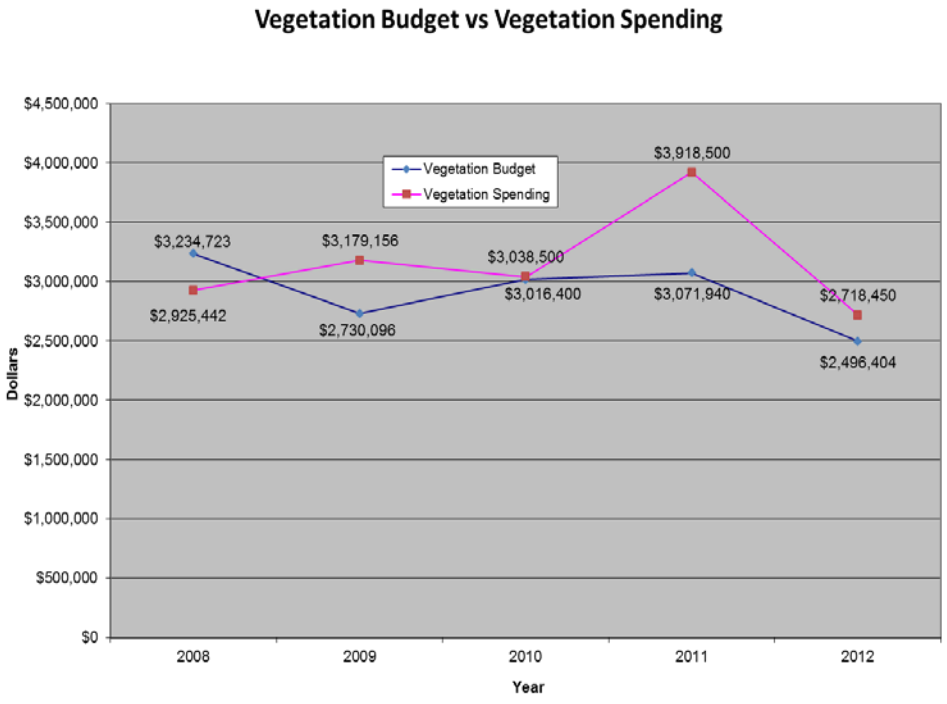


CAIDI is derived by dividing SAIDI by SAIFI. The statistic generally speaks to the amount of time needed to respond to an outage.

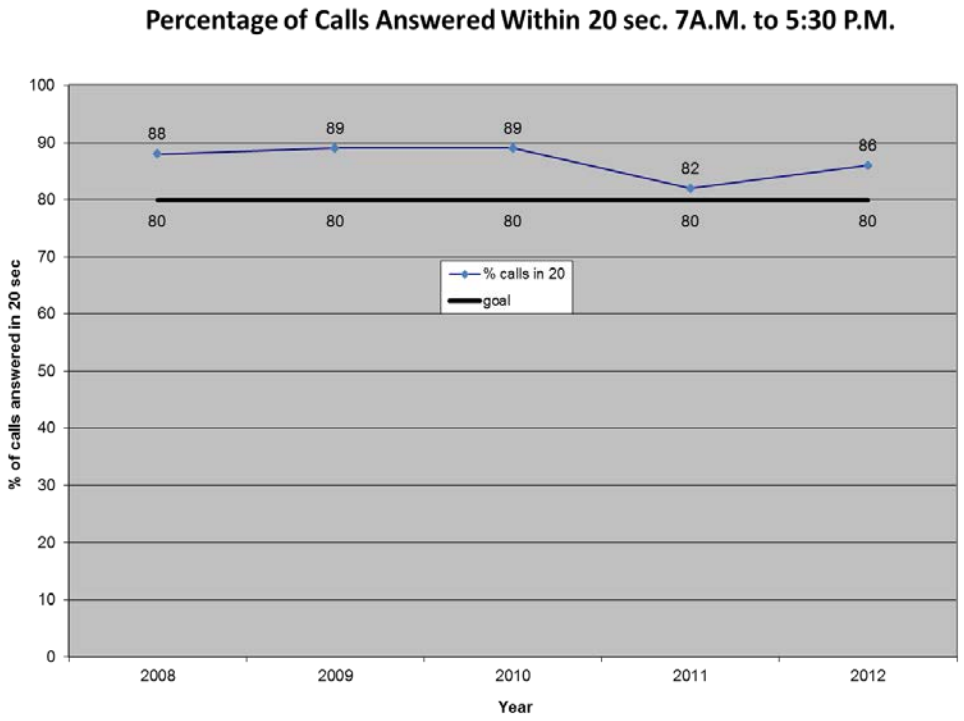


MAIFI* is the Momentary Average Interruption Frequency Indicie.

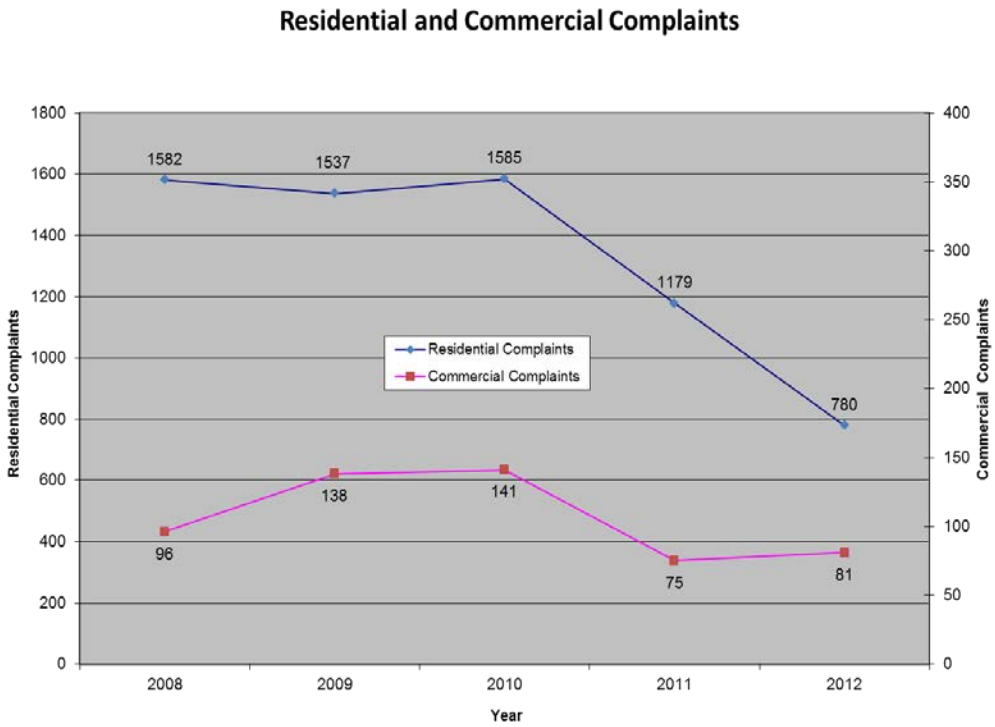
*The reader should be aware that the MAIFI calculation is as complete as the current data collection allows.



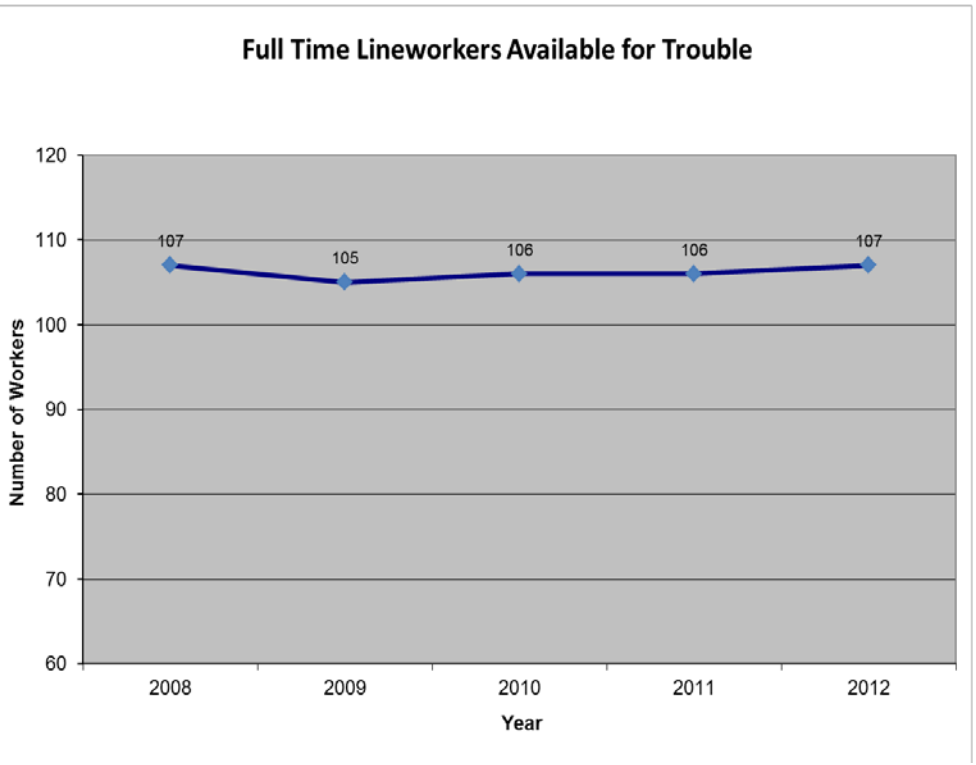
Vegetation management is administered to each distribution circuit on approximately a five year schedule. Successful vegetation management not only keeps vegetation out of the line, but also aids in keeping wildlife away from the line; making access to lines easier.



Answering a call in 20 seconds generally equates to three rings. Goal is 80 percent.



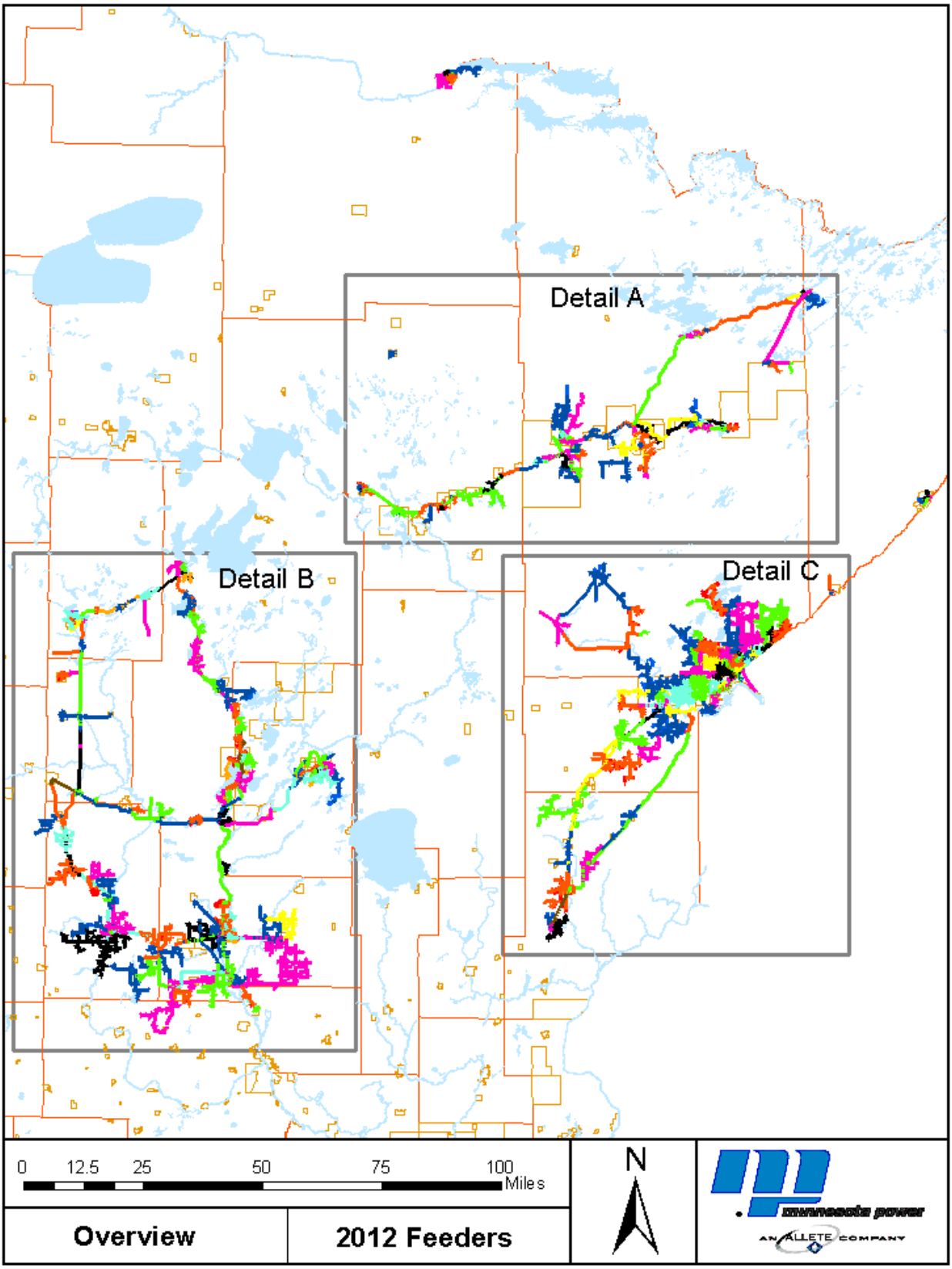
Customer complaints are generally tracked for alleged billing errors, inaccurate metering, wrongful disconnection, service extension intervals, service restoration intervals as well as other issues.

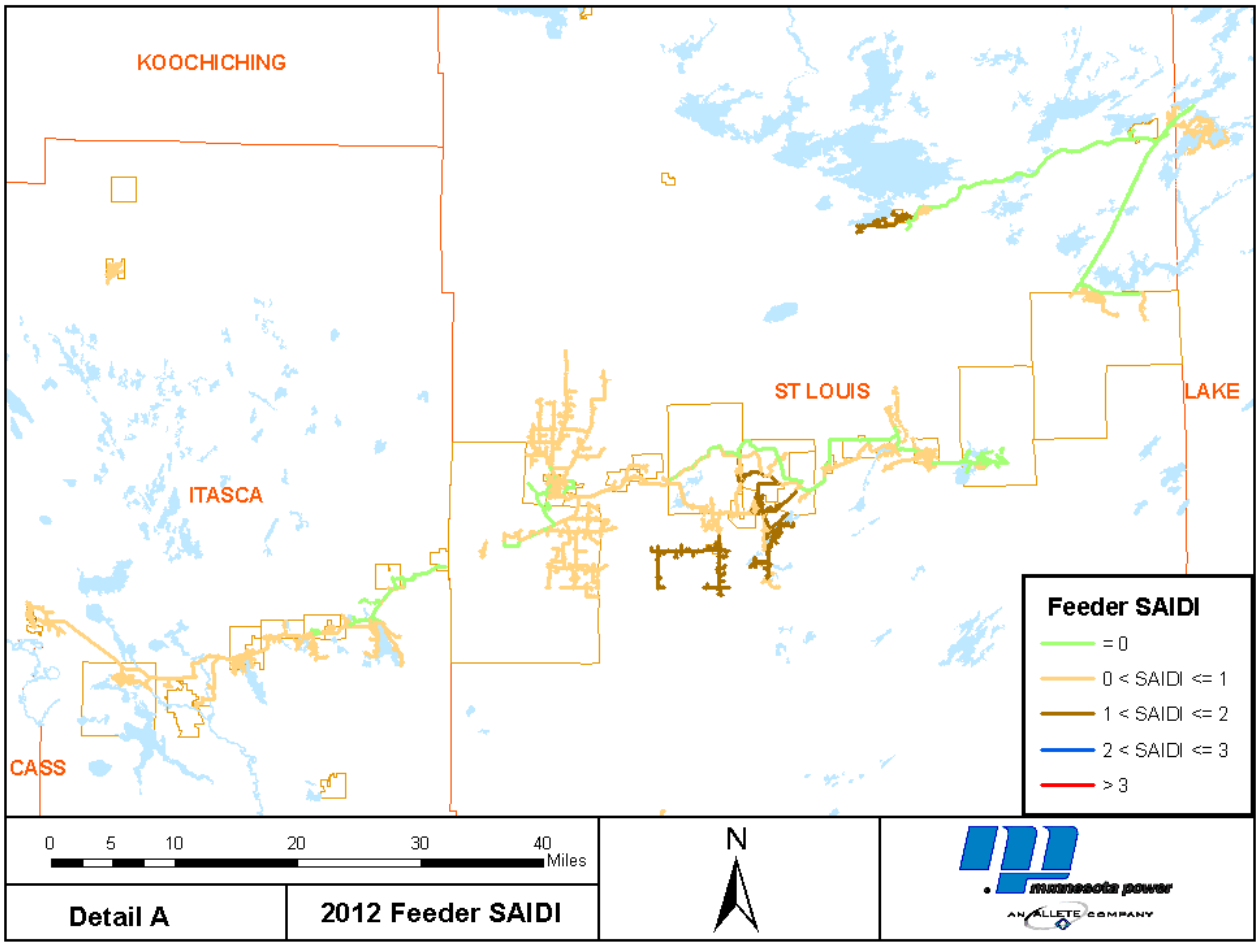


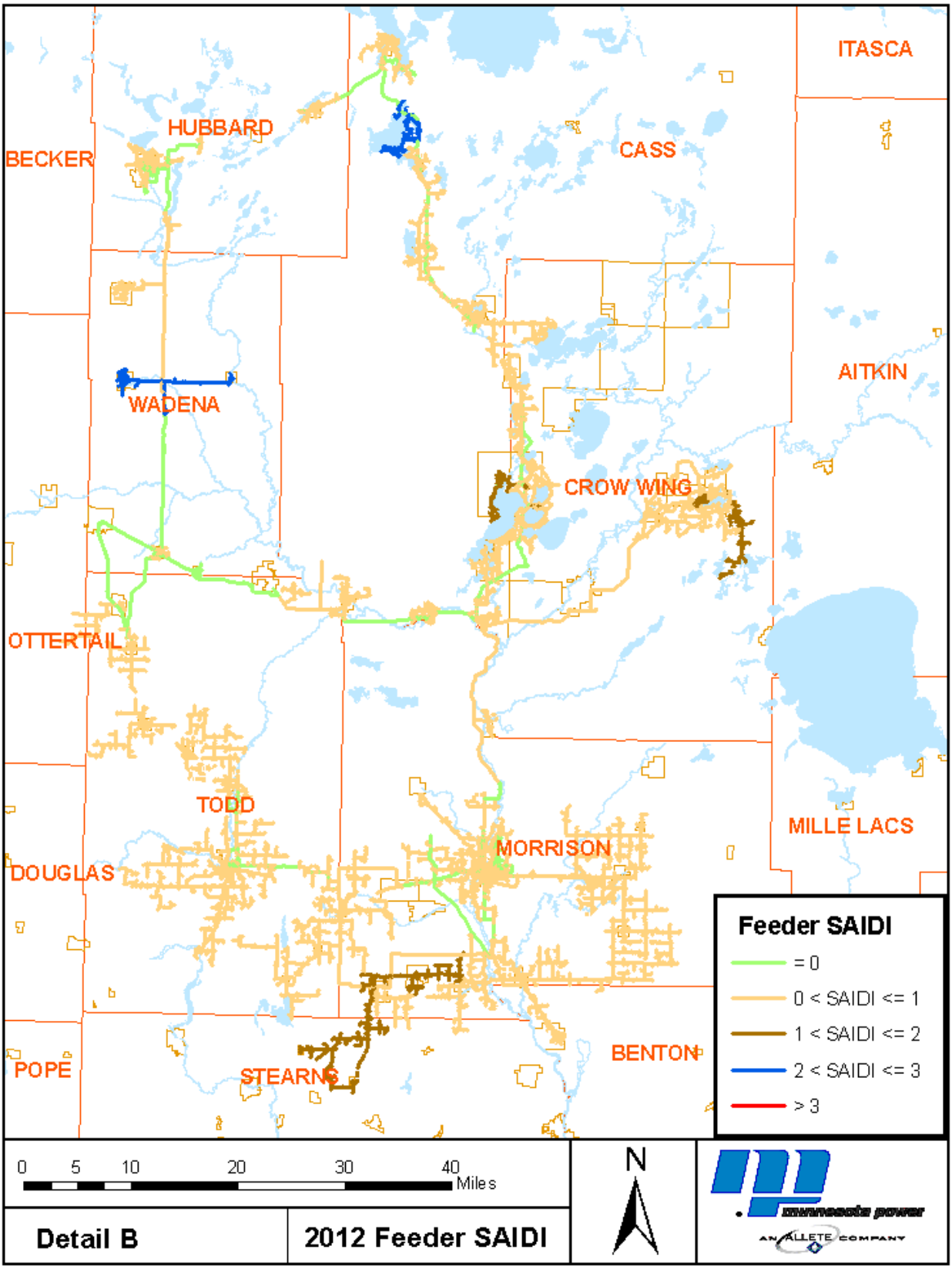
Minnesota Power had 107 full-time equivalent employees in Field Operations during 2012

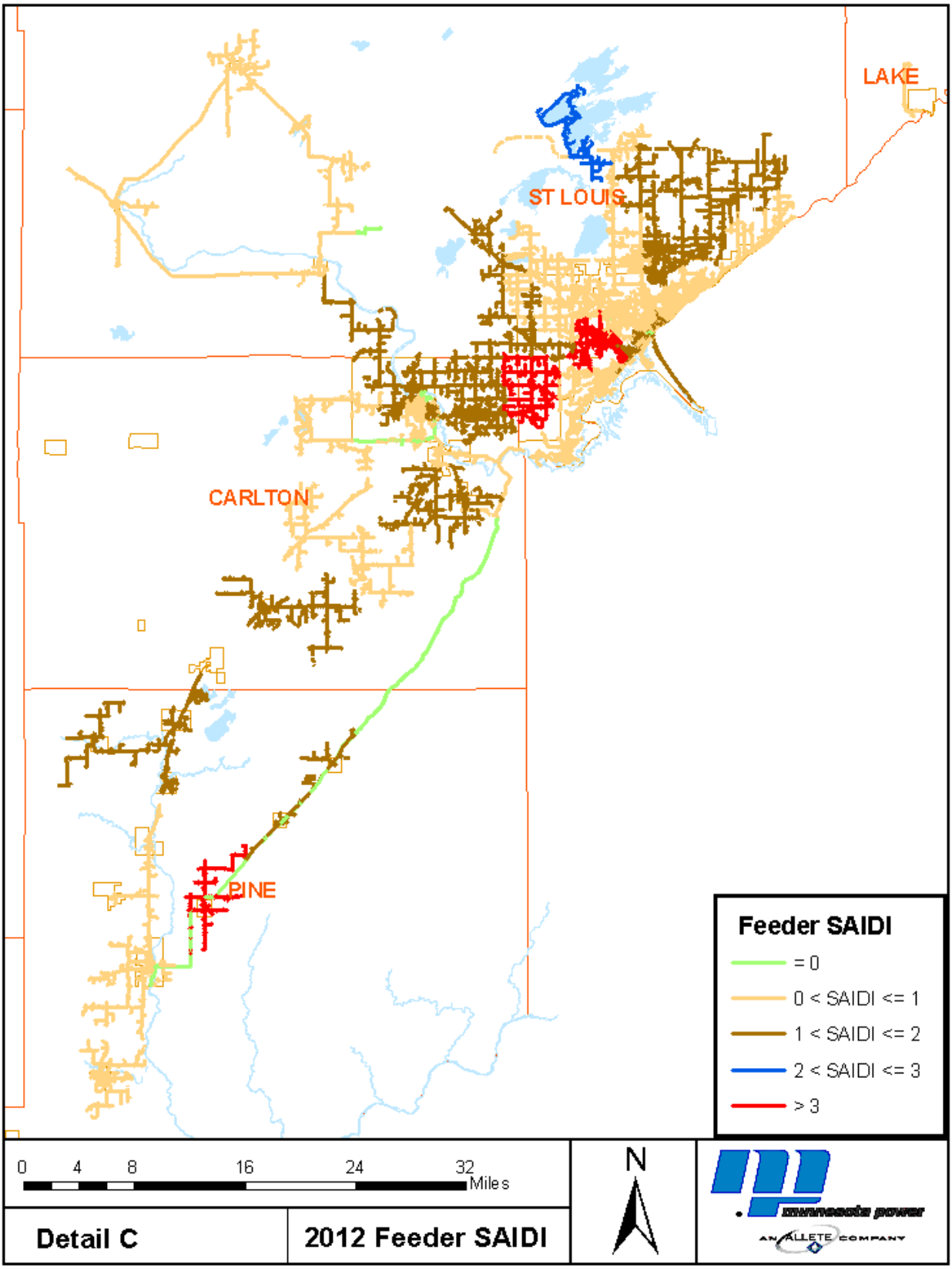
There are four maps presented below. The first is a "Key Map" and shows the entire Minnesota Power service territory. Adjoining feeders are displayed in different colors to give an idea of how many circuits there are and to what degree they are divided. There are approximately 300 circuits in the Minnesota Power distribution system. Due to space limitation, the feeders are not shown at optimal resolution. The three maps following the "Key Map" are three separate maps which show in minutes how much SAIDI each feeder has contributed to the overall company SAIDI. They are broken up geographically to make them easier to read.

.


Detail A
Detail B
Detail C
0 12.5 25 50 75 100
Miles
N
Overview
2012 Feeders
minnesota power
AN ALLETE COMPANY


KOOCHICHING
ITASCA
CASS
ST LOUIS
LAKE
Feeder SAIDI
= 0
0 < SAIDI <= 1
1 < SAIDI <= 2
2 < SAIDI <= 3
> 3
0 5 10 20 30 40
Miles
N
Detail A
2012 Feeder SAIDI
minnesota power
AN ALLETE COMPANY


ITASCA
HUBBARD
BECKER
CASS
AITKIN
WADENA
CROW WING
OTTERTAIL
TODD
MILLE LACS
MORRISON
DOUGLAS
BENTON
POPE
STEARNS
Feeder SAIDI
= 0
0 < SAIDI <= 1
1 < SAIDI <= 2
2 < SAIDI <= 3
> 3
0 5 10 20 30 40
Miles
N
Detail B
2012 Feeder SAIDI
minnesota power
AN ALLETE COMPANY


LAKE
ST LOUIS
CARLTON
PINE
Feeder SAIDI
= 0
0 < SAIDI <= 1
1 < SAIDI <= 2
2 < SAIDI <= 3
> 3
0 4 8 16 24 32
Miles
N
Detail C
2012 Feeder SAIDI
minnesota power
AN ALLETE COMPANY

Minnesota Power's Safety, Reliability and Service Quality Standards Report-Annual Safety Reporting in compliance with Docket No. E-999/R-01-1671.

Table of Contents:

ANNUAL SAFETY REPORT

7826.0400

A. *Summaries of all reports filed with United States Occupational Safety and Health Administration and the Occupational Safety and Health Division of the Minnesota Department of Labor and Industry during the calendar year.*

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	4	10	8

Number of Days

Total number of days of job transfer or restriction	Total number of days away from work
598	105

Injury and Illness Types

Injuries	Skin disorders	Respiratory conditions	Poisonings	All other illnesses
22	0	0	0	0

B. *A description of all incidents during the calendar year in which an injury requiring medical attention or property damage resulting in compensation occurred as a result of downed wires or other electrical system failures and all remedial action taken as a result of any injuries or property damage described.*

There were no incidents in 2012 in which injuries requiring medical attention occurred as a result of downed wires or other electrical system failures.

A listing of all incidents in which property damage resulting in compensation occurred as a result of downed wires or other electrical system failures and the remedial actions taken is included in the following table:

Date of Claim	Name	Cause of Damage	Paid	Remedial Action
1/12/12	Mattfield, Tracey	Vehicle Damage	$1,000.00	Reimbursement Made for Damages Incurred
4/01/12	Chaney, Melissa	Miscellaneous Equipment Failure	$1,421.98	Reimbursement Made for Damages Incurred
4/05/12	Enterprise	Vehicle Damage	$300.50	Reimbursement Made for Damages Incurred
5/02/12	Carlson, Dell	Work Procedure	$280.00	Reimbursement Made for Damages Incurred
5/07/12	French River Hatchery	Miscellaneous Equipment Failure	$858.68	Reimbursement Made for Damages Incurred
5/20/12	Tutor, Carlotta	Miscellaneous Equipment Failure	$704.43	Reimbursement Made for Damages Incurred
5/25/12	Deerwood, City of	Work Procedure	$889.50	Reimbursement Made for Damages Incurred
5/27/12	Marshik, Kevin	Work Procedure	$100.02	Reimbursement Made for Damages Incurred
5/30/12	Hutchinson, Nancy	Miscellaneous Equipment Failure	$690.66	Reimbursement Made for Damages Incurred
6/13/12	Allied Taxi	Vehicle Damage	$2,741.38	Reimbursement Made for Damages Incurred
6/22/12	Basturk, JeanAnn	Work Procedure	$57.80	Reimbursement Made for Damages Incurred
6/22/12	Fuchs, Angel	Work Procedure	$190.00	Reimbursement Made for Damages Incurred
6/22/12	Carlson, Norma	Work Procedure	$940.50	Reimbursement Made for Damages Incurred
6/22/12	Johnson, Gary	Work Procedure	$254.18	Reimbursement Made for Damages Incurred
8/01/12	Thorbjornsen, Brian	Work Procedure	115.00	Reimbursement Made for Damages Incurred
10/10/12	Deer River High School	Work Procedure	1,785.00	Reimbursement Made for Damages Incurred
10/03/12	Rosenquist, Jerry	Miscellaneous Equipment Failure	467.00	Reimbursement Made for Damages Incurred
TOTALS:	Total Claims: 17	**TOTAL PAYMENTS:**	$12,796.63	

7826.0500

The utility's SAIDI, SAIFI and CAIDI are calculated using the data excluded by the IEEE 2.5 beta method (data from major event days). Included are the causes of outages occurring on major event days, as well as the outage data using two different methods and detailed explanations of the differences. A major event is excluded based on the 2.5 beta method defined by the IEEE Standard for Distribution Reliability. The normalization process is designed to remove all outage records attributed to a specific, major event such as a large storm. Non-Major Event normalized means that all major events such as a wind storms, ice storms, etc, are included in the reliability calculations. Since there were two excluded events in 2012 these values are different than the Major Event normalized values.

A.

The utility's SAIDI for the calendar year by work center and for its assigned service area as a whole.

SAIDI (in minutes) **2012**	89.75

SAIDI calculated from Major Event Excluded data:

SAIDI (in minutes) **2012**	40.16

Major Event normalized using the IEEE 2.5 Beta method:

SAIDI (in minutes) **2012**	89.75

Non-Major Event normalized:

SAIDI (in minutes) **2012**	129.91

B.

The utility's SAIFI for the calendar year by work center and for its assigned service area as a whole.

SAIFI (# of outages) **2012**	0.93

SAIFI calculated from Major Event Excluded data:

SAIFI (# of outages) **2012**	0.14

Major Event normalized using the IEEE 2.5 Beta method:

SAIFI (# of outages) **2012**	0.93

Non-Major Event normalized:

SAIFI (# of outages) **2012**	1.07

C. *The utility's CAIDI for the calendar year by work center and for its assigned service area as a whole.*

CAIDI (outage min/customer) **2012**	95.99

CAIDI calculated from Major Event Excluded data:

CAIDI (outage min/customer) **2012**	25.47

Major Event normalized using the IEEE 2.5 Beta method:

CAIDI (outage min/customer) **2012**	95.99

Non-Major Event normalized:

CAIDI (outage min/customer) **2012**	121.46

D. *An explanation of how the utility normalizes its reliability data to account for major storms*.

In 2012, there were two major events excluded based on the 2.5 beta method defined by the IEEE Standard for Distribution Reliability. The normalization process is designed to remove all outage records attributed to a specific major event, such as a large storm. At Minnesota Power, normalization is performed only when the following criterion is met for a major event:

Daily SAIDI is greater than the Threshold for Major Event Days:

As storms occur, customers call into Minnesota Power representatives and/or the IVR system to report outages. Those calls are then used to create trouble orders using a prediction engine within the OMS. That information, along with information from other sources (Operations Log, and Telemetric's emails) is entered into a database for comparison. Often the weather event will have been

detected by multiple sources. Duplications are eliminated and an accurate time and duration for each event is calculated.

Once all data streams have been combined and duplications have been eliminated, the resulting database is analyzed by the Reliability Engineer. The database is queried to look for timeframes when the Company SAIDI has incurred an incremental increase above the Threshold for Major Event Days. When sets of data are discovered that meet the criterion discussed above, that data is flagged and set aside. What remains is Minnesota Power's Storm Normalized Data.

Threshold for Major Event Day calculation description:

A Threshold for a major event day (T_{med}) is computed once per year. First, assemble the 5 most recent years of historical values of daily SAIDI and discard any day with a SAIDI value of zero. Then, compute the natural log of each SAIDI value and compute the average (alpha) and standard deviation (beta) of the natural logarithms. The major event day threshold can then be found by using this equation: T_{med} = exp (alpha + 2.5*beta). If any day in the next year has SAIDI greater than T_{med}, it qualifies as a major event day. Note that an excluded event is not limited to a single day and may span consecutive days depending on the severity of the event.

As stated earlier, storm normalization is designed to exclude data from rare, major events that may skew the overall data. Two weather related major events, each spanning two days, were excluded in 2012. There were zero excluded events in 2011. There was one storm excluded event in 2010 that spanned two days. In 2009, there were zero excluded events. There were two storm excluded events in 2008 that met the Threshold for Major Event Day criterion. In 2007, there were two storm excluded events and there were also two events that met the second criteria (10 minutes added to SAIDI), but did not meet the first criteria of affecting at least 12 percent of Minnesota Power's customers. In 2006, two events met the first criteria (12 percent of customers); however none met the second requirement of increasing SAIDI by 10 minutes. Therefore, no events were excluded in 2006. Storm exclusion has followed a similar pattern in previous years. In 2004 and 2002 there were no events excluded. Three events were excluded in 2003 and only one in 2001 and 2005.

It is important to note that Minnesota Power's Geographic Information System mapping system was completed in 2004. This updated version shows all of the Company's customers by electric continuity (feeders), whereas the older version was simply a drawing without the electric continuity. In the older version the margin of error for counting customers affected by an outage was much greater. The addition of electric continuity will assist the Reliability Engineer in accurately determining a true customer count for the purposes of calculating SAIDI, SAIFI, etc.

In addition to the GIS improvements noted above, Minnesota Power implemented GE's PowerOn as an OMS in 2007. Minnesota Power is committed to providing the personnel and financial resources necessary to continually improve reliability reporting and response to outages.

E. *An action plan for remedying any failure to comply with the reliability standards set forth at part 7826.0600 or an explanation as to why non-compliance was unavoidable under the circumstances.*

Minnesota Power was successful in meeting the reliability standards set for SAIDI, SAIFI, and CAIDI for the year 2012.

Minnesota Power used the 2.5 beta method for excluding storm related outages, which excluded two weather related major events, each spanning two days, in 2012.

F. *To the extent technically and administratively feasible, a report on each interruption of a bulk power supply facility during the calendar year, including the reasons for interruption, duration of interruption, and any remedial steps that have been taken or will be taken to prevent future interruption.*

23 Line –

- In order to resolve interruptions, Distribution Engineering has developed a plan to effectively rebuild this line. This plan consists of, but is not limited to, the following actions:
    - The Sandstone substation will be removed and the source for the 46kV will be moved over to Great River Energy's ("GRE") Bear Creek 230kV/ 69kV substation in 2015. This will provide better reliability since the Bear Creek substation is a very strong source.
    - Minnesota Power is on schedule to have 23 Line completely rebuilt from the Bear Creek substation all the way up to Kerrick by 2015.
    - The section of 23 Line between Kerrick and Military Road will be eliminated after the rebuild is complete.
    - The section of 23 Line from the Thomson substation down to the Military Road substation will be eliminated and a new 115kV/46kV source will be built a few miles away at Wrenshall to feed the Military Road 46/13.8kV substation. This phase of the project will be completed last (after 2016) due to the satisfactory condition of this section of the line.
    - 23 Line received routine tree clearing in 2010.

- On **June 20, 2012,** torrential rains resulted in major flooding at the Thomson hydro station. This caused the breaker, 23L, at the Thomson substation to lock out. The load was transferred to GRE's Fond-du-Lac substation and customers were restored after 69 minutes.
- On **July 5, 2012,** a tree fell into 23 Line, which was being fed out of GRE's Fond-du-Lac substation. This caused the breaker, 24KB1, to lock out. Some customers were restored through sectionalizing. The tree was removed from the line and all customers were restored after 221 minutes.

- On **July 26, 2012,** a tree fell into 23 Line causing the breaker, 23LM, at the Sandstone substation to lock out. The tree was removed and all customers were restored after 111 minutes.
- On **November 24, 2012,** broken insulators, a broken cross arm, and broken wire caused 23LM at the Sandstone substation to lock out. Some customers were restored after 74 minutes. The broken equipment was fixed and the remaining customers were restored after 287 minutes.

28 Line –

- On **July 2, 2012,** a major storm in the northern part of Minnesota Power's service territory resulted in many trees taking down sections of line and caused a very lengthy outage to 28 Line. All customers were restored after 1,324 minutes.

31 Line –

- On **May 17, 2012,** windy conditions in the area knocked a tree into 31 Line taking down a section of the line. Repairs were made to the line and power was restored after 92 minutes. No further action is necessary.

59 Line –

- On **April 28, 2012,** a tree fell into 59 Line causing breakers 59L at the Mahtowa substation and 59LM at the Sandstone substation to lock out. Some customers were restored through sectionalizing. The tree was removed and all customers were restored after 97 minutes. No further action is necessary.

145 Line–

- On October 23, 2012, a tree fell into 145 Line and caused the breaker, 145L, at the Colbyville substation and the breaker, 42-145LW, at the Two Harbors substation to lock out. Some customers were restored after 37 minutes. The tree was removed and power was restored to the rest of the customers after 100 min.

G. *A copy of each report filed under part 7826.0700.*

There were 28 reports filed under 7826.0700 during 2012. Please refer to Attachment C for written copies of the reports.

2012 major interruptions affecting 500 or more customers for over an hour

FeederId	Communities	Customers Affected	Date/Time off	Date Off	Time Off	Date/Time On	Date On	Time On	Duration	Cause
FBG 269	Fredenburg	561	3/8/12 5:37 PM	3/8/2012	5:37PM	3/8/12 21:02	3/8/2012	9:02:00 PM	205 Minutes	Wind/Snow. Tree came down on one phase of primary
BLS-509	Pine River, Hackensack	1120	4/15/12 17:28 PM	4/15/2012	17:28:00 PM	4/15/12 18:44	4/15/2012	18:44:00 PM	74 MINUTES	Jack pine came down on line.
TWN-2	Tower	864	4/16/12 2:28 AM	4/16/2012	2:28:00 PM	4/16/12 7:28	4/16/2012	7:28:00 PM	300 MINUTES	3 highside fuses blown at Tower substation
MOT 1	Motley	864	4/16/12 3:06 AM	4/16/2012	3:06:00 AM	4/16/12 4:41	4/16/2012	4:41:00 AM	95 MINUTES	Tree on primary tripped recloser at sub.
BLD-524	Upsala, Sobieski	769	4/21/12 10:54 AM	4/21/2012	10:54:00 AM	4/21/12 12:02	4/21/2012	12:02:00 PM	68 MINUTES	Birds building nest on 524 feeder line, sticks on line.
6421/DEN-6431	Lk, Moose Lk, Barnum	1944	4/28/12 3:58 AM	4/28/2012	3:58:00 AM	4/28/12 5:32	4/28/2012	5:32:00 AM	94 MIINUTES	Tree came down on a main distribution line
FIF 234	DULUTH	573	4/30/12 9:10 AM	4/30/2012	9:10:00 AM	4/30/12 10:17	4/30/2012	10:17:00 AM	67 MINUTES	UG SPLICE FAILED
RVT 505-506	Riverton, Ironton, Crosby	1680	5/12/12 2:22 AM	5/12/2012	2:22:00 AM	5/12/12 3:44	5/12/2012	3:44:00 AM	82 MINUTES	Car hit pole between Ironton Reg Station and Ironton 76
BAB-1	Babbitt	744	5/17/12 1:36 PM	5/17/2012	1:36:00 PM	5/17/12 15:06	5/17/2012	3:06:00 PM	96 MINUTES	Wind blew tree down, took line down, caused forrest fire.
MDY 277	Duluth	971	5/27/12 9:31 PM	5/27/2012	9:31:00 PM	5/27/12 23:37	5/27/2012	11:37:00 PM	126 MINUTES	Storms/Lightning. Tree took down primary line.
SEB 1	Sebeka, Park Rapids	672	6/11/12 3:17 PM	6/11/2012	3:17:00 PM	6/11/12 17:18	6/11/2012	5:18:00 PM	121 MINUTES	tree on primary caused trip at sub.
RVT 505	Riverton, Ironton, Crosby	1596	6/17/12 10:14 PM	6/17/2012	10:14:00 PM	6/17/12 23:41	6/17/2012	11:41:00 PM	87 MINUTES	Storms caused tree limb on line near Ironton 76
23 Line	Sandstone	714	6/20/12 10:50 PM	6/20/2012	10:50:00 PM	6/20/12 23:59	6/20/2012	11:59:00 PM	73 MINUTES	Flooding at Thompson Hydro
BLS 509	Pine River, Hackensack	1149	7/2/12 7:15 PM	7/2/2012	7:15:00 PM	7/2/12 20:55	7/2/2012	8:55:00 PM	100 MINUTES	Storms in area.
MDY 277	Esko, Proctor, Midway	971	7/2/12 3:07 AM	7/2/2012	3:07 AM	7/2/12 4:50	7/2/2012	4:50 AM	103 MINUTE	MDY 277 - failed UG primary cable between HWY 35 88 and THOMSON HILL RD 77; partial restore time = 154 min
AKY 543		1804	7/2/12 7:21 PM	7/2/2012	7:21 PM	7/2/12 20:21	7/2/2012	8:21 PM	60 MINUTES	AKY 543 - storms in area
PQT 531		642	7/3/12 5:25 PM	7/3/2012	5:25 PM	7/3/12 18:52	7/3/2012	18:52	70 MINUTES	PQT 531 - failed arrester between sub and Nisswa pumping station 88
FIF 220		3206	7/3/12 9:55 PM	7/3/2012	9:55 PM	7/3/12 23:52	7/3/2012	11:52 AM	117 MINUTE	FIF 220 - failed UG cable between KING MANOR 88 & 220-260 TIE; partial restore time = 61 min
23 Line	askov, bruno, kerrick	690	7/5/12 12:14 AM	7/5/2012	12:14 AM	7/5/12 3:48	7/5/2012	3:48 AM	214 MINUTE	Tree on line
BLS 509	Pine River, Hackensac	1149	7/6/12 10:00 AM	7/6/2012	10:00	7/6/12 20:00	7/6/2012	20:00:00 PM	600 MINUTE	BLS 509 - lightning in area caused high side fuse on TML tx to blow resulting in lockout of 509 feeder; partial restore time = 601 min
BAC 1	Backus	634	7/6/12 10:14 AM	7/6/2012	10:14 AM	7/6/12 12:05	7/6/2012	12:05 PM	151 MINUTE	164422 - Tree took down two phases of primary line
DOG 503		553	7/8/12 7:26 PM	7/8/2012	7:26 PM	7/8/12 21:02	7/8/2012	21:02	96 MINUTES	DOG 503 - A broken insulator caused a conductor to fall into guy wire
23 Line		722	7/26/12 7:10 PM	7/26/2012	7:10 PM	7/26/12 20:59	7/26/2012	8:59 PM	109 MINUTE	Tree on line
FIF 260		770	8/4/12 12:43 AM	8/4/2012	12:43 AM	8/4/2012 1:52	8/4/2012	2:37 AM	14 MINUTES	FIF 260 - failed UG lead cable between Area Cultural Center 77 and sub; partial restore time = 69 min
MDY 277		2108	8/6/12 6:30 PM	8/6/2012	6:30 PM	8/7/12 2:50 AM	8/7/2012	2:50 AM	00 MINUTES	(section of 223 also) MDY 277 - failed UG cable between Stark 88 and St Louis River Rd 77; partial restore time = 284 min
MDY 278		597	8/10/12 2:15 AM	8/10/2012	2:15 AM	8/10/2012 4:50	8/10/2012	4:50 AM	53 MINUTES	MDY 278 - Bad UG primary cable between Morrist Thomas Rd 88 and Hwy 2 77; Partial Restore time = 138 min
23 Line		714	11/24/12 3:16 AM	########	3:16 AM	11/24/12 8:05	11/24/2012	8:05 AM	289 MINUTE	Crews found broken insulators, cross arm, and wire in multiple locations. Partial restore at 151 minutes.

H. *To the extent technically feasible, circuit interruption data, including identifying the worst performing circuit in each work center, stating the criteria the utility used to identify the worst performing circuit, stating the circuit's SAIDI, SAIFI, and CAIDI, explaining the reasons that the circuit's performance is in last place, and describing any operational changes the utility has made, is considering, or intends to make to improve its performance.*

Section H requires that Minnesota Power report on the Company's worst performing circuit for each work center. Since Minnesota Power considers its entire service area a single work center, this would result in only one circuit being reported. As in the past, rather than listing only one feeder, the four worst performing feeders (2 urban and 2 rural) are identified. This is done in recognition of how reliability indices are affected by differing characteristics of feeder length and quantity of customers.

The feeder evaluation process utilized high feeder SAIDI and high total customer-minutes of outage (i.e. # customers X SAIDI) as criteria for selection of two urban and two rural feeders.

The following table clarifies the selections:

Worst Performing Feeders Using Storm Normalized Data

Criteria	**Circuit**	**# Customers**	**SAIDI**	**SAIFI**	**CAIDI**
High Feeder SAIDI (Urban)	Haines Road 248	3	1,734.00	2.00	867.00
High Customer Outage Minutes (Urban)	Haines Road 236	4166	458,677	2.97	37.07
High Feeder SAIDI (Rural)	Askov 6521	462	1072.61	6.74	159.14
High Customer Outage Minutes (Rural)	Midway 277	971	545,353	3.76	190.33

Haines Road 248

Major Outage Events:

- **June 20, 2012 –** Torrential rains caused major flooding in the Duluth area. The Miller Mall switchgear in 248 feeder was underwater for over 24 hours.
  - No further action is necessary.

- **July 20, 2012** – A bad section of underground cable caused 248 feeder to be without power for 41 minutes.
  - Repairs were made to the bad cable and power was restored**.**

Haines Road 236

Major Outage Events:

- **August 29, 2012** – A tree fell into 236 feeder causing a lock out on the breaker, 236F.
  - Some customers were restored through sectionalizing. The tree was removed and power was restored to the remaining customers.

- **October 29, 2012** – While crews were discharging nitrogen gas from #2 transformer at the Haines Road substation a sudden pressure alarm tripped causing breakers 1T, 52-58MW, and 52L at the Haines Road substation and 58L at the Arrowhead substation to lock out.
  - Repairs were made to the control circuit and power was restored.

- **November 28, 2012** – Crews working on 236 feeder caused a jumper to contact the primary conductor causing the breaker, 236F, to lock out.
  - The jumper was reconnected and power was restored.

Askov 6521

Major Outage Events:

- **June 20, 2012** – Torrential rains caused major flooding at the Thomson Hydro station causing the breaker, 23L, to lock out.
  - The Askov 6521 load was transferred to Great River Energy's Fond-du-Lac substation.

- **July 5, 2012** – A tree fell into 23 Line causing the breaker, 24KB1, at Great River Energy's Fond-du-Lac substation.
  - The tree was removed from the line, repairs were made, and power was restored.

- **July 23, 2012** – There was a planned outage for the entire Askov 6521 feeder so crews could work on the 23 Line rebuilding project.

- **July 26, 2012** - A tree fell into 23 Line causing 23L to lock out.
  - The tree was removed from the line, repairs were made, and power was restored.

- **August 17, 2012** – There was a planned outage for the entire Askov 6521 feeder so crews could transfer phases to a new switch as part of the 23 Line rebuild.

- **November 24, 2012** – Broken insulators, a broken cross-arm, and broken wire in 23 Line caused the breaker, 23 LM, to lock out.
  - Crews made repairs to the broken equipment and power was restored. 23 Line is in the process of being rebuilt.

Midway 277

Major Outage Events:

- **May 27, 2012** – A storm in the area knocked a tree onto the line resulting in a lockout of the breaker, 277F.
  - The tree was removed, repairs were made to the line, and power was restored.

- **July 02, 2012** – Lightning in the area caused a section of underground cable to fail.
  - Repairs were made to the bad section of cable and power was restored.

- **August 6, 2012** – A section of underground cable failed causing the breaker, 277F, to lock out.
  - Repairs were made to the bad section of cable and power was restored.

I. *Data on all known instances in which nominal electric service voltages on the utility's side of the meter did not meet the standards of the American National Standards Institute for nominal system voltages greater or less than voltage range B.*

There were 2 reported instances in 2012.

Date	Account	Trouble Order
12/18/2012	71178127	N/A
10/16/2012	183489	N/A

J. *Data on staffing levels at each work center, including the number of full-time equivalent positions held by field employees responsible for responding to trouble and for the operation and maintenance of distribution lines.*

Minnesota Power had 107 full-time equivalent field employee positions in 2012 responsible for responding to trouble calls and for the operation and maintenance of distribution lines.

K. *Any other information the utility considers relevant in evaluating its reliability performance over the calendar year.*

Minnesota Power has no additional information to report at this time.

RELIABILITY STANDARDS

7826.0600
Subpart 1

A. *On or before April 1 of each year, each utility shall file proposed reliability performance standards in the form of proposed numerical values for the SAIDI, SAIFI, and CAIDI for each of its work centers. These filings shall be treated as "miscellaneous tariff filings" under the Commission's rules of practice and procedure, part 7829.0100, subp. 11.*

Minnesota Power proposes the following weather-excluded reliability indices as targets not to exceed in 2013:

SAIDI = 90.60
SAIFI = 0.99
CAIDI = 91.52

The SAIDI target is calculated as an average of the last five years of actual SAIDI performance.

The SAIFI target is calculated as an average of the last five years of actual SAIFI performance.

The CAIDI target is calculated as SAIDI divided by SAFI.

REPORTING METER-READING PERFORMANCE

7826.1400

The annual service quality report shall include a detailed report on the utility's meter-reading performance, including, for each customer class and for each calendar month:

A. *The numbers and percentages of customer meters read by utility personnel.*

Residential

					Total	System Total
Jan-12	113,391	1,220	114,611	**98.94%**	145,459	**77.95%**
Feb-12	113,007	1,573	114,580	**98.63%**	145,448	**77.70%**
Mar-12	113,444	1,134	114,578	**99.01%**	145,419	**78.01%**
Apr-12	113,638	947	114,585	**99.17%**	145,414	**78.15%**
May-12	113,396	1,202	114,598	**98.95%**	145,491	**77.94%**
Jun-12	115,768	2,327	118,095	**98.03%**	145,596	**79.51%**
Jul-12	111,521	3,101	114,622	**97.29%**	145,654	**76.57%**
Aug-12	110,150	4,501	114,651	**96.07%**	145,697	**75.60%**
Sep-12	111,537	3,166	114,703	**97.24%**	145,765	**76.55%**
Oct-12	115,847	2,356	118,203	**98.01%**	145,896	**79.40%**
Nov-12	111,939	2,836	114,775	**97.53%**	145,912	**76.72%**
Dec-12	107,433	4,096	111,529	**96.33%**	145,899	**73.64%**
2012 Avg	112,589	2,372	114,961	**97.93%**		**77.31%**

Commercial

Month	Co. Reads	Est	Total	% Read	System Total	% Read of System Total
Jan-12	19,173	309	19,482	**98.41%**	145,459	**13.18%**
Feb-12	19,084	409	19,493	**97.90%**	145,448	**13.12%**
Mar-12	19,174	333	19,507	**98.29%**	145,419	**13.19%**
Apr-12	19,221	298	19,519	**98.47%**	145,414	**13.22%**
May-12	19,169	384	19,553	**98.04%**	145,491	**13.18%**
Jun-12	19,050	536	19,586	**97.26%**	145,596	**13.08%**
Jul-12	18,993	628	19,621	**96.80%**	145,654	**13.04%**
Aug-12	18,983	681	19,664	**96.54%**	145,697	**13.03%**
Sep-12	19,049	661	19,710	**96.65%**	145,765	**13.07%**
Oct-12	19,172	594	19,766	**96.99%**	145,896	**13.14%**
Nov-12	19,175	615	19,790	**96.89%**	145,912	**13.14%**
Dec-12	17,527	972	18,499	**94.75%**	145,899	**12.01%**
2012 Avg	18,981	535	19,516	**97.25%**		**13.03%**

Industrial

Month	Co. Reads	Est	Total	% Read	System Total	% Read of System Total
Jan-12	462	13	475	**97.26%**	145,459	**0.32%**
Feb-12	466	9	475	**98.11%**	145,448	**0.32%**
Mar-12	468	9	477	**98.11%**	145,419	**0.32%**
Apr-12	473	3	476	**99.37%**	145,414	**0.33%**
May-12	476	2	478	**99.58%**	145,491	**0.33%**
Jun-12	462	17	479	**96.45%**	145,596	**0.32%**
Jul-12	462	16	478	**96.65%**	145,654	**0.32%**
Aug-12	471	10	481	**97.92%**	145,697	**0.32%**
Sep-12	460	21	481	**95.63%**	145,765	**0.32%**
Oct-12	461	21	482	**95.64%**	145,896	**0.32%**
Nov-12	460	18	478	**96.23%**	145,912	**0.32%**
Dec-12	394	22	416	**94.71%**	145,899	**0.27%**
2012 Avg	460	13	473	**97.14%**		**0.32%**

Municipal Pumping

Month	Co. Reads	Est	Total	% Read	System Total	% Read of System Total
Jan-12	294	8	302	**97.35%**	145,459	**0.20%**
Feb-12	294	8	302	**97.35%**	145,448	**0.20%**
Mar-12	293	9	302	**97.02%**	145,419	**0.20%**
Apr-12	294	8	302	**97.35%**	145,414	**0.20%**
May-12	294	11	305	**96.39%**	145,491	**0.20%**
Jun-12	290	15	305	**95.08%**	145,596	**0.20%**
Jul-12	290	15	305	**95.08%**	145,654	**0.20%**
Aug-12	293	13	306	**95.75%**	145,697	**0.20%**
Sep-12	291	16	307	**94.79%**	145,765	**0.20%**
Oct-12	296	12	308	**96.10%**	145,896	**0.20%**
Nov-12	287	18	305	**94.10%**	145,912	**0.20%**
Dec-12	241	25	266	**90.60%**	145,899	**0.17%**
2012 Avg	288	13	301	**95.58%**		**0.20%**

Lighting

Month	Co. Reads	Est	Total	% Read	System Total	% Read of System Total
Jan-12	191	4	195	**97.95%**	145,459	**0.13%**
Feb-12	195	2	197	**98.98%**	145,448	**0.13%**
Mar-12	194	3	197	**98.48%**	145,419	**0.13%**
Apr-12	195	2	197	**98.98%**	145,414	**0.13%**
May-12	196	3	199	**98.49%**	145,491	**0.13%**
Jun-12	193	6	199	**96.98%**	145,596	**0.13%**
Jul-12	194	5	199	**97.49%**	145,654	**0.13%**
Aug-12	196	4	200	**98.00%**	145,697	**0.13%**
Sep-12	191	9	200	**95.50%**	145,765	**0.13%**
Oct-12	193	7	200	**96.50%**	145,896	**0.13%**
Nov-12	194	8	202	**96.04%**	145,912	**0.13%**
Dec-12	125	16	141	**88.65%**	145,899	**0.09%**
2012 Avg	188	6	194	**96.84%**		**0.13%**

B. *The numbers and percentages of customer meters self-read by customers.*

Residential

					Total	System Total
Jan-12	50	10	60	**83.33%**	145,459	**0.03%**
Feb-12	66	14	80	**82.50%**	145,448	**0.05%**
Mar-12	68	8	76	**89.47%**	145,419	**0.05%**
Apr-12	71	6	77	**92.21%**	145,414	**0.05%**
May-12	75	11	86	**87.21%**	145,491	**0.05%**
Jun-12	44	15	59	**74.58%**	145,596	**0.03%**
Jul-12	78	8	86	**90.70%**	145,654	**0.05%**
Aug-12	69	11	80	**86.25%**	145,697	**0.05%**
Sep-12	37	11	48	**77.08%**	145,765	**0.03%**
Oct-12	29	5	34	**85.29%**	145,896	**0.02%**
Nov-12	17	11	28	**60.71%**	145,912	**0.01%**
Dec-12	26	8	34	**76.47%**	145,899	**0.02%**
2012 Avg	53	10	62	**82.15%**		**0.04%**

Commercial

					Total	System Total
Jan-12	24	4	28	**85.71%**	145,459	**0.02%**
Feb-12	30	4	34	**88.24%**	145,448	**0.02%**
Mar-12	24	7	31	**77.42%**	145,419	**0.02%**
Apr-12	26	7	33	**78.79%**	145,414	**0.02%**
May-12	30	3	33	**90.91%**	145,491	**0.02%**
Jun-12	19	7	26	**73.08%**	145,596	**0.01%**
Jul-12	28	6	34	**82.35%**	145,654	**0.02%**
Aug-12	24	7	31	**77.42%**	145,697	**0.02%**
Sep-12	12	6	18	**66.67%**	145,765	**0.01%**
Oct-12	8	6	14	**57.14%**	145,896	**0.01%**
Nov-12	11	3	14	**78.57%**	145,912	**0.01%**
Dec-12	8	5	13	**61.54%**	145,899	**0.01%**
2012 Avg	20	5	26	**76.49%**		**0.01%**

Industrial

Month	Cust Reads	Est	Total	% Read	System Total	% Read of System Total
Jan-12	1	0	1	**100.00%**	145,459	**0.00%**
Feb-12	1	0	1	**100.00%**	145,448	**0.00%**
Mar-12	1	0	1	**100.00%**	145,419	**0.00%**
Apr-12	1	0	1	**100.00%**	145,414	**0.00%**
May-12	0	1	1	**0.00%**	145,491	**0.00%**
Jun-12	1	0	1	**100.00%**	145,596	**0.00%**
Jul-12	0	1	1	**0.00%**	145,654	**0.00%**
Aug-12	1	0	1	**100.00%**	145,697	**0.00%**
Sep-12	1	0	1	**100.00%**	145,765	**0.00%**
Oct-12	1	0	1	**100.00%**	145,896	**0.00%**
Nov-12	1	0	1	**100.00%**	145,912	**0.00%**
Dec-12	1	0	1	**100.00%**	145,899	**0.00%**
2012 Avg	1	0	1	**83.33%**		**0.00%**

Municipal Pumping

No Self-reads

Lighting

No Self-reads

C. *The number and percentage of customer meters that have not been read by utility personnel for periods of six to twelve months and for periods of longer than twelve months, and an explanation as to why they have not been read.*

Residential/Commercial/ Industrial /Municipal Pumping/Lighting

Months Estimated	Company Read Service Points	% of Total	Not Read Reason	Customer Read Service Points	% of Total	Not Read Reason
6 Months	19	0.013%	No Access/AMR	0	0.000%	No Access
7 Months	19	0.013%	No Access/AMR	1	0.001%	No Access
8 Months	21	0.014%	No Access/AMR	0	0.000%	No Access
9 Months	31	0.021%	No Access/AMR	1	0.001%	No Access
10 Months	8	0.005%	No Access/AMR	1	0.001%	No Access
11 Months	7	0.005%	No Access/AMR	0	0.000%	No Access
12 Months	7	0.005%	No Access/AMR	1	0.001%	No Access
12+Months	3	0.002%	No Access/AMR	3	0.002%	No Access
Totals:	**115**			**7**	**0**	

Minnesota Rules 7820.3300 requires that meters be read at least annually.

Customers with Company Read meters that are not read for six to twelve months are left reminder notices at the home and/or are sent reminder letters of the utility's need to access the meter. A similar process is used for Customer Read meters not read for over twelve months. In addition, phone calls are made to each customer in an attempt to schedule a meter reading. Disconnection warnings are issued for unresponsive accounts. In accordance with the Cold Weather Rule, no disconnections for unread meters are performed during the Cold Weather Rule months.

D. *Data on monthly meter-reading staffing levels, by work center or geographical area*

Staffing by Work Center (Minnesota Power System)

2012	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Meter Reader Collector	9	9	8.5	9	8.5	9	9	9	9	9	9	9

REPORTING INVOLUNTARY DISCONNECTIONS

7826.1500

The annual service quality report must include a detailed report on involuntary disconnections of service, including, for each customer class and each calendar month:

A. *the number of customers who received disconnection notices;*
B. *the number of customers who sought cold weather rule protection under chapter 7820 and the number who were granted cold weather rule protection;*
C. *the total number of customers whose service was disconnected involuntarily and the number of these customers restored to service within 24 hours;*
D. *the number of disconnected customers restored to service by entering into a payment plan.*

2012 Involuntary Disconnection Report

	A			B		C						D		
	# Customers Receiving Disconnection Notices			# Customers Who Sought CWR Protection	# Customers Who Were Granted CWR Protection	# Customers Disconnected Involuntarily			# Customers Restored within 24 hours			# Customers Restored to Service by entering into a payment plan		
Month	Res	Com	Ind	Res Only	Res Only	Res	Com	Ind	Res	Com	Ind	Res	Com	Ind
Jan	2897	878	12	1025	1025	96	12	0	60	2	0	13	0	0
Feb	2845	889	15	431	430	165	13	0	85	3	0	13	0	0
Mar	2720	1065	18	204	204	140	13	0	76	2	0	16	0	0
Apr	6065	891	17	19	18	424	9	0	221	5	0	72	2	0
May	3500	831	20	0	0	792	6	0	429	7	0	146	0	0
Jun	2882	726	19	0	0	388	9	0	229	1	0	74	0	0
Jul	3535	558	11	0	0	346	1	0	174	0	0	46	0	0
Aug	2979	498	11	0	0	374	4	0	142	1	0	42	0	0
Sep	3048	465	12	0	0	479	11	0	251	3	0	58	0	0
Oct	1355	836	18	423	423	220	4	0	116	0	0	55	0	0
Nov	2092	760	12	600	600	45	1	0	23	0	0	16	0	0
Dec	3919	690	17	525	522	49	2	0	22	0	0	18	0	0
Total	**37837**	**9087**	**182**	**3227**	**3222**	**3518**	**85**	**0**	**1828**	**24**	**0**	**569**	**2**	**0**
	(No other customer class experienced involuntary disconnection in 2012)													

REPORTING SERVICE EXTENSION REQUEST RESPONSE TIMES

7826.1600

The annual service quality report must include a detailed report on service extension request response times, including, for each customer class and each calendar month:

A. *The number of customers requesting service to a location not previously served by Minnesota Power and the intervals between the date service was installed and the later of the in-service date requested by the customer or the date the premises were ready for service.*

Residential Locations not Previously Served						
2012 Month	Request Date Met	1-10 Days	11-21 Days	Over 21 Days	Total	Response Time (Calendar Days)
January	7	0	0	0	7	-0.71
February	4	0	0	0	4	-0.50
March	4	1	0	0	5	-1.00
April	17	5	1	0	23	-4.57
May	23	0	1	1	25	-3.16
June	29	5	0	1	35	-2.26
July	23	8	5	0	36	0.42
August	21	7	2	1	31	-10.06
September	33	5	1	1	40	-3.75
October	42	8	2	2	54	-6.74
November	57	5	2	34	98	8.33
December	15	1	2	2	20	3.05
Totals	275	45	16	42	378	-0.55

Commerical Locations not Previously Served						
2012 Month	Request Date Met	1-10 Days	11-21 Days	Over 21 Days	Total	Response Time (Calendar Days)
January	8	1	0	0	9	0.11
February	6	0	0	0	6	0.10
March	12	1	0	0	13	-2.46
April	7	3	0	1	11	0.91
May	16	2	0	1	19	-2.21
June	18	9	2	1	30	0.03
July	23	4	3	4	34	-2.03
August	28	4	1	2	35	-4.57
September	24	4	0	0	28	-5.79
October	27	12	1	1	41	0.22
November	18	4	5	2	29	-1.21
December	12	3	0	1	16	-3.63
Totals	199	47	12	13	271	-1.98

Industrial Locations not Previously Served						
2012 Month	Request Date Met	1-10 Days	11-21 Days	Over 21 Days	Total	Response Time (Calendar Days)
January	0	0	0	0	0	0.00
February	0	0	0	0	0	0.00
March	0	0	0	0	0	0.00
April	0	0	0	0	0	0.00
May	1	0	0	0	1	0.00
June	0	0	0	0	0	0.00
July	0	0	0	0	0	0.00
August	0	1	0	1	2	33.50
September	0	0	0	0	0	0.00
October	1	0	0	0	1	0.00
November	0	0	0	0	0	0.00
December	0	0	0	0	0	0.00
Totals	2	1	0	1	4	16.75

The following table lists the number and percentage of locations not previously served by Minnesota Power where the service was installed later than the in-service date requested by the customer or the date the premises were ready for service and the reason for the delay:

Delays due to Customer:	**Number**	**Percentage**
Customer Site not ready:	79	44.63%
Inspection/Affidavit not received:	4	2.26%
Late Notification	6	3.39%
No Access:	2	1.13%
Cust Redesign	2	1.13%
Cust Had Not Applied	1	0.56%
Delays Due to Utility:		
Bad Date Info	18	10.17%
Redesign Job	1	0.56%
Workload	50	28.25%
Material/equipment unavailable	1	0.56%
Paperwork lost	1	0.56%
Staffing	3	1.69%
Other:		
Road Restrictions	2	1.13%
Weather	5	2.82%
Waiting for Donation Check	1	0.56%
Waiting on Contractor	1	0.56%

B. *The number of customers requesting service to a location previously served by the Minnesota Power, but not served at the time of the request, and the intervals between the date service was installed and the later of the in-service date requested by the customer or the date the premises were ready for service.*

Residential Locations Previously Served						
2012 Month	Request Date Met	1-10 Days	11-21 Days	Over 21 Days	Total	Response Time (Calendar Days)
January	102	2	0	0	104	-0.54
February	75	6	0	1	82	0.13
March	99	6	0	1	106	0.03
April	135	11	0	0	146	-0.73
May	241	3	0	2	246	-0.09
June	213	3	0	0	216	-0.29
July	176	5	0	0	181	-0.29
August	212	15	1	0	228	-0.07
September	190	9	2	1	202	0.10
October	255	10	0	1	266	0.24
November	146	9	1	1	157	-0.17
December	93	6	1	0	100	-0.14
Totals	1937	85	5	7	2034	-0.13

Commerical Locations Previously Served						
2012 Month	Request Date Met	1-10 Days	11-21 Days	Over 21 Days	Total	Response Time (Calendar Days)
January	29	5	2	0	36	0.28
February	35	0	1	0	36	-0.11
March	68	1	0	0	69	-0.13
April	47	2	0	0	49	-1.16
May	25	5	2	0	32	0.34
June	26	0	0	0	26	-0.38
July	53	2	2	0	57	0.16
August	41	3	0	0	44	-1.89
September	41	1	2	0	44	-0.16
October	28	3	0	1	32	-1.28
November	22	4	0	0	26	-3.27
December	20	3	0	0	23	-2.61
Totals	435	29	9	1	474	-0.69

Industrial Locations Previously Served						
2012 Month	Request Date Met	1-10 Days	11-21 Days	Over 21 Days	Total	Response Time (Calendar Days)
January	0	0	0	0	0	0.00
February	0	0	0	0	0	0.00
March	5	0	0	0	5	-7.20
April	2	0	0	0	2	0.00
May	1	1	0	0	2	1.00
June	1	0	0	0	1	-10.00
July	1	0	0	0	1	0.00
August	3	0	0	0	3	0.00
September	1	0	0	0	1	0.00
October	1	0	0	0	1	0.00
November	2	0	0	0	2	0.00
December	0	0	0	0	0	0.00
Totals	17	1	0	0	18	-2.44

The following table lists the number and percentage of locations previously served by Minnesota Power where the service was installed later than the in-service date requested by the customer or the date the premises were ready for service and the reason for the delay:

Delays due to Customer:		
Customer Site not ready:	25	18.25%
Inspection/Affidavit not received:	3	2.19%
Late Notification	37	27.01%
No Access to Meter		0.00%
Locked Door	7	5.11%
Delays Due to Utility:		
Bad Date Info	21	15.33%
Workload	37	27.01%
Job redesigned	2	1.46%
Other:		
Road Restrictions	1	0.73%
Weather	3	2.19%
Union Strike @ site	1	0.73%
	137	

REPORTING CALL CENTER RESPONSE TIMES

7826.1700

The annual service quality report must include a detailed report on call center response times, including calls to the business office and calls regarding service interruptions. The report must include a month-by-month breakdown of this information.

Percent of all calls answered within 20 seconds.

Business Hours 7:00 a.m. - 5:30 p.m.				After Hours 5:30 p.m. - 7:00 a.m.			
Month	2012	Total Calls	Calls Answered within 20 seconds	Month	2012	Total Calls	Calls Answered within 20 seconds
JAN	91%	11,811	10,731	JAN	73%	642	468
FEB	89%	13,792	12,309	FEB	76%	791	604
MAR	92%	14,396	13,194	MAR	69%	895	615
APRIL	87%	16,329	14,137	APRIL	60%	1,134	684
MAY	83%	17,089	14,266	MAY	60%	1,183	705
JUNE	83%	15,565	12,947	JUNE	60%	1,147	686
JULY	82%	15,869	13,080	JULY	43%	1,881	813
AUG	81%	15,843	12,902	AUG	55%	1,308	720
SEP	77%	15,233	11,726	SEP	67%	932	620
OCT	84%	16,342	13,764	OCT	65%	956	620
NOV	90%	13,144	11,642	NOV	79%	629	500
DEC	90%	11,461	10,351	DEC	73%	605	440
YTD	**86%**	**176,874**	**151,049**	YTD	**65%**	**12,103**	**7,475**

All calls to Minnesota Power – whether they relate to service interruption, line extension, billing inquiries or any other subject matter – are routed through the Company's IVR unit. Customers have a menu of options within the IVR to choose from in order to address the subject of their call. The first option is to report an outage by entering a trouble order; the fifth option is to speak directly to a Call Center representative.

Calls routed to outage reporting are handled immediately through the automated trouble-order system; calls that are directed to the Call Center are manually entered into the trouble-order system by the Call Center representative.

Minnesota Power is able to use IVR data to report the number of service interruption calls; however, the IVR is unable to track a response time on an individual contact type. Calls that go to a Call Center representative are also tracked by type of contact. Like the IVR calls, Minnesota Power is able to report the number of service interruption calls; however, is unable to track a response time on an individual contact type.

In summary, Minnesota Power's response time percentage is shown as an aggregate of all calls received through the IVR and the Call Center, and the calls are not broken out by type of call because Minnesota Power is unable to separate response time by contact type.

REPORTING EMERGENCY MEDICAL ACCOUNT STATUS

7826.1800

The annual service quality report must include the number of customers who requested emergency medical account status under Minn. Stat. §216B.098, subd. 5, the number whose applications were granted, and the number whose applications were denied, and the reasons for each denial.

In 2012, Minnesota Power had 172 customers request emergency medical account status. All 172 requests were granted after each provided Minnesota Power with signed physician documentation indicating need. All documentation is on file and available upon request.

REPORTING CUSTOMER DEPOSITS

7826.1900

The annual service quality report must include the number of customers who were required to make a deposit as a condition of receiving service.

Number of required deposits from customers applying for service:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Res	**24**	**28**	**29**	**19**	**27**	**29**	**28**	**30**	**33**	**20**	**26**	**22**	**315**
Com	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Total	**24**	**28**	**29**	**19**	**27**	**30**	**28**	**30**	**33**	**20**	**26**	**22**	**316**

(No other customer class was required to provide a deposit)

REPORTING CUSTOMER COMPLAINTS

7826.2000

The annual service quality report must include a detailed report on complaints by customer class and calendar month, including at least the following information:

A. *The number of complaints received.*

	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total	
Commercial	5	9	7	8	4	5	4	11	13	4	3	8	81	9.41%
Residential	55	84	84	44	28	40	46	92	80	67	70	90	780	90.59%
Industrial	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Total	60	93	91	52	32	45	50	103	93	71	73	98	861	100.00%

(Any complaints for other customer classes are handled individually and as such not recorded in Minnesota Power's Customer Information System.)

B. *The number and percentage of complaints alleging billing errors, inaccurate metering, wrongful disconnection, high bills, inadequate service, and the number involving service extension intervals, service restoration intervals, and any other identifiable subject matter involved in five percent or more of customer complaints.*

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Billing Error	Commercial	1	1	2	1	1	3	2	0	1	0	1	0	13	1.53%
Billing Error	Residential	1	6	9	1	2	2	2	4	2	5	3	1	38	4.46%
Incorrect Metering	Commercial	0	2	1	3	1	0	0	2	5	3	1	5	23	2.70%
Incorrect Metering	Residential	13	10	6	7	4	7	2	10	34	32	31	19	175	20.54%
Wrongful Disconnection	Residential	0	0	0	0	0	1	0	0	0	0	0	0	1	0.12%
High Bill Complaint	Commercial	3	6	4	4	2	1	1	9	7	1	1	2	41	4.81%
	Residential	37	58	62	35	21	25	34	77	41	22	32	66	510	59.86%
Inadaquate Service	Commercial	1	0	0	0	0	1	1	0	0	0	0	1	4	0.47%
Inadaquate Service	Residential	3	8	7	0	0	4	6	1	2	8	3	4	46	5.40%
Service Restoration	Residential	0		0	1	0	0	0	0	0	0	0	0	1	0.12%
Total		**59**	**91**	**91**	**52**	**31**	**44**	**48**	**103**	**92**	**71**	**72**	**98**	**852**	**100.00%**

The total number of complaints/contacts in this table is 852 whereas the total in Part A was 861. The difference is 9 complaints forwarded to Minnesota Power by the Commission's Consumer Affairs Office for further investigation and action in 2012.

C. *The number and percentage of complaints resolved upon initial inquiry, within ten days, and longer than ten days.*

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total	Percent of Total
Gr Than 10 Days	Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Gr Than 10 Days	Residential	4	3	1	1	1	0	0	2	2	2	2	0	19	2.21%
Less Than 10 Days	Commercial	0	0	0	2	0	1	2	0	3	0	0	0	7	0.81%
Less Than 10 Days	Residential	0	5	3	4	3	5	4	8	2	6	4	4	48	5.57%
Same Day Resolution	Commercial	5	9	7	6	4	5	2	11	10	4	3	8	74	8.59%
Same Day Resolution	Residential	51	76	80	39	24	34	42	82	76	59	64	86	713	82.81%
Total		60	93	91	52	32	45	50	103	93	71	73	98	861	100%

D. *The number and percentage of all complaints resolved by taking any of the following actions: (1) taking the action the customer requested; (2) taking an action the customer and the utility agree is an acceptable compromise, (3) providing the customer with information that demonstrates that the situation complained of is not reasonably within the control of the utility; or (4) refusing to take the action the customer requested.*

Customer Class	Commercial	Residential		
Resolution Reason	Count of Contacts	Count of Contacts	Total	Percent of Resolved Contacts
Customer Request	16	78	94	10.9%
Compromise	29	232	261	30.3%
No Control	34	457	491	57.0%
Refuse	2	13	15	1.8%
Total	**81**	**780**	**861**	**100.0%**

E. *The number of complaints forwarded to the utility by the Commission's Consumer Affairs Office for further investigation and action.*

Minnesota Power had 9 complaints (9 Residential/0 Commercial) forwarded to the utility by the Commission's Consumers Affairs Office for further investigation and action in 2012.

2012			
	Customer Contact Type	**Month/Year**	**# of Contacts**
Commercial	Fwd to MP by MPUC		0
Total			0
Residential	Fwd to MP by MPUC	Jan-12	1
Residential	Fwd to MP by MPUC	Feb-12	2
Residential	Fwd to MP by MPUC	May-12	1
Residential	Fwd to MP by MPUC	Jun-12	1
Residential	Fwd to MP by MPUC	Jul-12	2
Residential	Fwd to MP by MPUC	Sep-12	1
Residential	Fwd to MP by MPUC	Nov-12	1
Total			9
Industrial			0
Total			0
Total All Classes			9

Attachment A

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Minnesota Power's 2013 Annual Report Concerning Past, Current and Planned Smart Grid Projects	Docket No. E999/CI-08-948 COMPLIANCE REPORT

Minnesota Power submits this Report to the Minnesota Public Utilities Commission ("Commission") in compliance with the Commission's Order dated June 5, 2009 (Docket No. E-999/CI-08-948). This report supplements last year's report as it is meant to serve as an update to Minnesota Power's Smart Grid activities. Minnesota Power welcomes questions and feedback pertaining to the information presented in this Report.

Review of Past Smart Grid Projects

Minnesota Power serves approximately 143,000 retail electric customers and 16 municipal systems across a 26,000-square-mile service area in central and northeastern Minnesota. Residential customers comprise less than 10 percent of the utility's total annual delivery. More than half of Minnesota Power's total energy supply is sold to industrial customers who operate around the clock. This ratio of industrial demand gives Minnesota Power a uniquely high load factor and a load profile with less variation than most utilities.

For more than 35 years, Minnesota Power has been making strategic investments into infrastructure and technologies to improve both the transmission and distribution systems that make up its grid. Minnesota Power has progressed from a company that was utilizing leased line substation communications prior to 1976 to a Company that is seen as a forward-looking distribution utility focused on the cost effective use of communication infrastructure. A brief history of Minnesota Power's investments to upgrade its system includes:

Year 1976 – Initial use of analog wireless substation communication towers

> Allowed monitoring and automated control of Minnesota Power's Utility Substations. Communication paths with substations allowed for tremendous increase in operational efficiencies that resulted in less labor for managing remote facilities.

Year 1978 – First U.S. utility owned fiber optic used for operations

Paralleled with the deployment of wireless networks, Minnesota Power saw the value of bandwidth and movement of high volumes of data related to fiber-optic networks to manage its critical substation assets. These investments have continued to provide a reliable and secure path to manage its most critical assets.

Year 1992 – Use of public wireless networks for meter data retrieval

The advent of Solid state measurement devices in the late 1980's allowed for tremendous advancement in the way customer information was handled. Advanced Mobile Phone Systems ("AMPS") allowed utilities to replace labor intensive systems with analog wireless communication, allowing on-demand retrieval of usage data and reporting of service level issues.

Year 1994 – Substation communication converted to digital wireless

Conversion to digital wireless was a natural progression for the Company's analog systems, as that equipment became obsolete and required considerable amount of additional maintenance.

Year 2000 – Investment in power line carrier Automated Meter Reading ("AMR") System

Investment in AMR was a major step forward in efficiency. By deploying a one-way power line carrier network, Minnesota Power was able to get regular, reliable meter readings without the use of manual labor for meter reading. This allowed for a great deal more customer data to be stored for historical records and provided back to customers.

Year 2007 – Final conversion of AMPS wireless to digital

AMPSwas determined to be an obsolete technology by the Federal Communications Commission, which forced replacement of all of the AMPS communication devices deployed across the country.

Year 2008 – Advance Metering Infrastructure ("AMI") smart meters deployed

As AMI systems became commercially available, Minnesota Power looked at all of the additional benefits that a higher speed, two-way AMI system could provide. The benefits of AMI are discussed in the Current and Planned Smart Grid Projects section of this report.

Year 2011 to present – Distribution Automation Self-Healing Network Online

In a partnership with the U.S. Department of Energy, Minnesota Power was able to deploy its first self-healing distribution network on its system. The system uses logic to limit the impact of outages to as few customers as possible. The Company installed all equipment in 2011 to create what is known in the utility industry as a "self-healing" or "self-correcting" feeder. The equipment and a high level of key enhancements it facilitates include:

- Six S&C IntelliRupter PulseCloser intelligent switches (can also function as reclosers).

- Eight intelligent dynamic devices (2 existing reclosers and the 6 IntelliRupters) tied together and communicating with fiber optics.

- Switches are individually programmed to isolate a fault and automatically reconfigure the circuit to restore customers

- Automatic switching and isolation will result in lower customer outage minutes by dynamically responding to fault situations.

Current and Planned Smart Grid Projects

In late 2007, Minnesota Power initiated evaluation of AMI technology. This evaluation resulted in the development of Minnesota Power's Smart Grid-AMI Pilot Project. The Company was selected to receive a Department of Energy ("DOE") American Recovery and Reinvestment Act ("ARRA") Smart Grid Investment Grant ("SGIG") for the Smart Grid-AMI Pilot Project totaling $1.5 million, or one-half of the estimated total project costs. See Table 2- Summary of the costs for currently planned Smart Grid projects, on Page 8, for further details of project budget information.

Advanced Metering Infrastructure:

Minnesota Power continues the process of implementing its AMI meter installation. At the end of 2012 the Company had installed approximately 14,000 AMI meters. The current AMI population represents approximately 10 percent of the overall meter population. (See Table 1)

Table 1 illustrates the type and approximate percentage of meters currently in use

Equipment	Percent in Use	Description
Mechanical Meters	Less than 1%	Traditional electro-mechanical meter that records kWh usage.
AMR – Mechanical Hybrid	70%	Traditional Electro-mechanical meters that are retro-fitted with a one-way electronic automatic meter reading (AMR) module capable of reporting multiple quantities including kWh, kW, and outage count.
AMR – Solid State	19%	Modern Solid State electronic meters integrated with a one-way AMR module or retrofitted with an external AMR unit. Capable of reporting multiple quantities including kWh, kVARh, kW, and outage count.
AMI – Solid State	10%	Modern solid state devices integrated with a two-way AMI communication module. Capable of multiple measurement functions including Time of Use (TOU), kW, kWh, KVA, kVAh, kVAR, kVARh, instantaneous and average voltage, two channel load profile, and remote disconnect. Also capable of remote firmware, program, and display updates.

The vast majority of these AMI meters are part of the Smart Grid-AMI Pilot Project. The Smart Grid-AMI Pilot Project is designed to provide an incremental, but functional increase in the Company's ability to better serve customers. Overall, the AMI system will allow efficient metering access between Minnesota Power and its customers. With the meters acting as smart nodes on each premise, a multitude of benefits can be derived including: efficient deployment of advanced time-based rates, outage notification, and notification of service issues (such as low/high voltage and tamper warnings), improved load control, and more frequent customer data. The expansion of Minnesota Power's AMI capabilities lays the groundwork for further Smart Grid initiatives.

Transmission Investments

The Company is continuing a project to replace certain 115kV line panels at key substation locations, and install system software that improves grid intelligence and enhances cyber security. This project involves installing a cyber-security solution to meet North American Electric Reliability Corporation ("NERC") Critical Infrastructure Protection ("CIP") requirements on Minnesota Power's Energy Management System ("EMS"). The project will deploy and test technology across a networked infrastructure to achieve the following: collection of non-operational data to a single intelligent source, NERC CIP conforming remote cyber secure access for equipment configuration and control, unified event file collection and archiving, and collection of data for smart condition based maintenance.

Minnesota Power's line panel project is aimed at implementing the necessary digital upgrades in the Company's transmission line infrastructure thereby improving outage detection and equipment maintenance. Key system software upgrades will help improve protection against cyber-related vulnerabilities. The upgrades also facilitate operating efficiency by reducing line panel maintenance, by insuring communication between system operators and new line panels, and by increasing overall system reliability. The modern technology utilized improves the reliability, security, and efficiency of Minnesota Power's electric grid.

Outage Management

Minnesota Power unveiled a website-based Outage Center in 2010 which facilitates the reporting and display of outage information. The Outage Center provides visitors with specific outage locations and also allows them to report outages or check the status of outages online. In 2011, Minnesota Power introduced applications to allow customers to view the Outage Center on their Android, Blackberry and iPhone devices. Customers are able to now report outages as well as check on the status of outages from anywhere at any time.

In addition to the customer-centric features described above, Minnesota Power has completed implementation on its planned integration of the Outage Management System ("OMS") and AMI system. The interface streams data directly from customer meters to the OMS. The architecture of the system provides outage or "last gasp" messages from all AMI meters. The meters utilize an internal temporary power source to provide notification of customer outages. Additionally, the meters stream "power on" messages when service is

restored. The interface between the OMS and AMI system was completed in November of 2012 and is currently in use by approximately 10 percent of Minnesota Power's AMI meter population.

Voltage Monitoring:

In 2006, Minnesota Power began a pilot program to install voltage/outage monitoring equipment on primary lines that were not monitored by its EMS to enhance outage response on these lines. These were normally lower voltage rural systems served by substations without any communications infrastructure. The pilot grew over the past several years to include other applications including customer sites and some lines that had limited EMS data points. These pilot installations have been improving outage response times due to the fact that dispatchers are able to send crews out to the right locations faster and restore outages at a more rapid pace. More precisely monitoring voltages also helps the Company determine the overall condition of the system, including voltage imbalances, during peak loading periods.

Midwest Independent System Operator[1] ("MISO") Synchrophasor Project:

Minnesota Power is a participant in the Midwest Independent Transmission System Operator ("MISO") Synchrophasor Project. MISO was awarded a SGIG to install Phasor Measurement Units ("PMUs") across its footprint. The PMUs will provide high speed data that can be used, in part, to verify the computer simulation models that are used to plan and operate the system today. As application software matures along with the rollout of these devices across the Eastern Interconnection[2], there is potential to operate the system based on data collected from the synchrophasor devices. To date, Minnesota Power has installed three PMU's and one Phasor Data concentrator ("PDC"). The PDC compiles all the PMU data from Minnesota Power and sends it to MISO in one data stream. All equipment is currently operational and providing high speed measurement information to MISO and critical locations throughout the transmission system.

Time-of-Use Rates and Demand Response

[1] The Midwest Independent System Operator is an independent, nonprofit organization that supports the reliable delivery of electricity in 13 U.S. states and the Canadian province of Manitoba.

[2] All of the electric utilities in the Eastern Interconnection are electrically tied together during normal system conditions and operate at a synchronized frequency operating at an average of 60Hz. The Eastern Interconnection reaches from Central Canada Eastward to the Atlantic coast (excluding Québec), South to Florida, and back West to the foot of the Rockies (excluding most of Texas).

Minnesota Power continues development of its Time-of-Day Rate with Critical Peak Pricing pilot project and submitted its proposed Time-of-Day Rate filing to the Commission on March 20, 2012.[3] The accompanying web portal that enables customers to view their usage information in monthly, daily and hourly increments was also introduced to Pilot Project participants in March of 2012. These efforts build upon Minnesota Power's existing conservation improvement programs and will offer insight into customer's appetites for more frequent and in depth information about their energy usage. Minnesota Power is currently awaiting final Commission approval of the Rate filing before presenting the Time-of-Day Rate application to customers.

Project Cost and Cost Effectiveness

To date, Minnesota Power has spent $2.9 million of the $3.1 million projected Smart Grid-AMI Pilot Project budget. Approximately $1.45 million of the total project budget was provided through the SGIG. The majority of the grant expenditures were utilized for expanding the capability of the AMI system, the Dual Fuel system upgrade, and the Distribution Automation project.

The total SGIG investment in the Dual Fuel system upgrade to date is approximately $420,000. This $420,000 investment has saved Minnesota Power approximately $300,000 in capital costs compared to what would have been necessary if the older system was still in place. With this upgrade, Minnesota Power has realized a 70 percent reduction in overall costs for the Dual Fuel system. This reduction includes savings in operations and maintenance.

For the Distribution Automation portion of the project Minnesota Power invested approximately $550,000 ($250,000 in intelligent switches and $300,000 in fiber communication). The fiber communications addition provided further communication redundancy between two critical substations in the Duluth area, along with providing situational awareness at the distribution feeder level. Minnesota Power has not yet experienced a major event on this portion of the system partially because there have been such drastic increases in reliability on the feeder. Therefore, it is not yet possible to speak to the performance of the system upgrade during a major event.

[3] Docket No. E015/M-12-233

Table 2- Summary of the costs for currently planned Smart Grid projects.

Project	**Total Cost**	**Portion Recovered Through SGIG**
AMI meter expansion	$1.54	$725,000
Distribution Automation	$250,000	$125,000
Dual Fuel Upgrade	$420,000	$210,000
Voltage Monitoring	$300,000	$300,000 ($50,000/year for 6 years)
MISO Synchrophasor Project	$150,000	$150,000

Conclusion

Minnesota Power continues to be active and engaged in the developments surrounding a modernized electric grid. Minnesota Power will assess the performance and cost effectiveness of current projects and continue investment in those deemed beneficial to the Company and its customers. The Company will also pursue promising investments as additional advancements are achieved in Smart Grid technology. Minnesota Power has gained knowledge from being involved in the SGIG process and trusts that advancements on the grid will continue to produce positive results for customers and utilities alike.

Attachment B

MIDWEST MUTUAL ASSISTANCE ROSTER

INDEX

COMPANY	ZONE (S)
Alliant Energy - IPL	1
Alliant Energy - WPL	1
Ameren	1 & 2
American Electric Power	2 & 3
American Transmission Company	1
Black Hills Energy	2
CenterPoint Energy	3
ComEd	1 & 2
Duke Energy	2
Empire District Electric Company	2 & 3
Entergy	2 & 3
Indianapolis Power & Light Co.	2
ITC Midwest	1
Kansas City Power & Light Co.	2
LG&E and KU Energy LLC	2
Madison Gas & Electric	1
Mid-American Energy Co.	1 & 2
Midwest Energy, Inc.	2
Minnesota Power- Allete	1
Nebraska Public Power District	1 & 2
Northern Indiana Public Service Co.	1 & 2
Northwestern Energy	1
OG&E Electric Services	2 & 3
Omaha Public Power District	1 & 2
Oncor Electric Delivery	3
Otter Tail Power Co.	1
Texas-New Mexico Power Co.	3
Vectren Energy Delivery of Indiana	2
WE Energies	1
Westar Energy	2
Wisconsin Public Service Corp.	1
Xcel Energy- Northern States Power Co.	1
Xcel Energy- Public Service Co. of Colorado	2
Xcel Energy	3

Midwest Mutual Assistance

Emergency Call Agenda

	This Call		Next Call	
Date:			Date:	
Time:			Time:	
Phone:		1-866-556-3960	Phone:	1-866-556-3960
Code:		5475663	Code:	5475663

Required Zones for Call

Zone# 1	Zone #2	Zone #3	Members	Roll Call (Check off list)		Roll Call (Check off list		WEATHER/FORECAST/CONDITIONS	SYSTEM PROBLEMS			
									Customer Outage (Peak)	Customer Outage (Current)	Cases of Trouble	Estimated Time of Restoration
Zone #1			Alliant Energy - IPL	Mike Adrian		Dee Brown						
				Lisa Henderson								
			Alliant Energy - WPL	Mike Schmid		Diane Schuler						
				Steve Dilley								
			American Transmission Company	System Operator		Thomas Betthauser						
				System Operator		Nick Grossenbach						
			ITC Midwest	Steve Sczytko		Wayne Kenniker						
				Mark Tollendorf		Rolland Scheels						
			Madison Gas & Electric	Jim Lorenz		MGE Dispatch Office						
				Richard Schwarz								
			Minnesota Power- Allete	Larry Tessier		Chuck Kimball						
				John Muehlbauer								
			Northwestern Energy	Mike Sydow		Steve Arbach						
				Reed McKee								
			Otter Tail Power Co.	Dan Wynn								
				Brad Howland								
			WE Energies	Jim Charboneau		Mike DiGiacomo						
				Glenn Peliska		Dave Effertz						
			Wisconsin Public Service Org.	Don LuMaye		Otto Marquardt						
				Vern Peterson								
			Xcel Energy- Northern States Power Company	Todd Place		Sean Walker						
				Tim Virant								
	None #2		Ameren	Mike Gillson		Dave Muntean						
				Riley Adams								
			ComEd	Bob Plant		Bob Charland						
				Dawn Owens								
			Mid-American Energy Co.	Terry Smith		Matt Mitchell						
				Tom Anderson		Mark Weeks						
			Nebraska Public Power District	Robert Ausdemore		Paul Brune						
				Scott Walz								
			Northern Indiana Public Service Co.	Daniel Piekarski								
				Alex Cervantes								
			Omaha Public Power District	Tom Larsen		Blaine Dinwiddie						
				Jerry McCaw		Roger Peterson						
			Black Hills Energy	David Atwood		Tom Cote						
				Colennda Fratterelli								
			Duke Energy	Marty Zearbaugh		Joan Daugherty						
				Marc Arnold								
			LG&E and KU Energy LLC	John Wolfe		Shenita Gazaway						
				Charles Hudson		Robby Trimble						
			Indianapolis Power & Light Co.	Greg Micheel		Dan Davenport						
				Kevin Walker		Mark Irving						
			KCP&L	Randy Watson		Chris Kurtz						
				Carol Baxter		Duane Anstaett						
			Midwest Energy, Inc.	Dale Giebler								
				Fred Taylor								
			Vectren Energy Delivery of Indiana	Chris Claybrooks		Mike Singer						
				Brian Gatewood								
			Westar Energy	Jim Tyler								
				Bryan Nowlin								
			Xcel Energy- Public Service Company of Colorado	Rodney Hunter		Teresa Maestas						
				Richard de Aragon								
		None #3	American Electric Power	James Nowak								
				David Callahan								
			Empire District Electric Company	Tina Gaines		Lance Burbridge						
				Sam McGarrah								
			Entergy	Mike Fricke		Bill Howell						
				David Luthe								
			OG&E Electric Services	Rick Berg		Mike Mathews						
				Gary Rowlett								
			CenterPoint Energy	Randy Pryor		Thomas Klesel						
				Doug White		Ernie Kaster						
			Texas-New Mexico Power Co.	Mike Grider		Neal Walker						
				Allen Aars								
			Oncor Electric Delivery	Mike Carter		Jeff Dossey						
				Joe Bilbo								
			Xcel Energy	Joey Zahn		Gary Lakey						
				Julie Dillard								
									0	0	0	

MIDWEST MUTUAL ASSISTANCE

ZONE 1

Dec-12

COMPANY	NAME	OFFICE	PHONE EXT.	FAX	CELL	HOME	PAGER	E-MAIL
ALLIANT ENERGY- IPL								
200 FIRST Street SE	Mike Adrian	641.470.4000		641.470.4002	319.551.5455	641.919.6248		mikeadrian@alliantenergy.com
Cedar Rapids, IA 52401	Lisa Henderson	319.786.8177		319786.7633	319.551.6440	319.294.4481		lisahenderson@alliantenergy.com
800.373.1303	Dee Brown	319.786.7273		319.786.7633	319.551.0267	319.551.0267		deebrown@alliantenergy.com
	NOTES: 24/7 Distribution Distpatch Center- IPL 800.526.3323 covering Iowa, Minnesota, and Western Illinois							
ALLIANT ENERGY- WPL								
4902 Biltmore Ln.	Mike Schmid	608.328.5335		608.328.5390	608.575.3668	608.325.5616		mikeschmid@alliantenergy.com
Madison, WI 53718	Steve Dilley	608.845.1136		608.845.1114	608.575.7855	608.214.9417		stevedilley@alliantenergy.com
800.521.1725	Diane Schuler	608.458.3026		608.458.0124	608.575.8924	608.837.2912		dianeschuler@alliantenergy.com
	NOTES: 24/7 Distribution Distpatch Center- WPL 800.551.1744 covering Wisconsin, and Northern Illinois							
AMERICAN TRANSMISSION								
N19W 23993 Ridgeview PK	System Operator- Pewaukee SOC	877.402.5227						mag@atcllc.com
Waukesha, WI 53187-0047	System Operator- Cottage Grove SOC	800.937.3762						
866.899.3204	Thomas Betthauser	262.993.1296			262.993.1296			tbetthauser@atcllc.com
Emergency Control Center 877.402.5228	NOTES: Nick Grossenbach Ph: 262.506.6770							
ITC MIDWEST								
27175 Energy Way	Steve Sczytko	248.946.3382		248.946.3378	734.395.5240	734.676.2343		ssczytko@itctransco.com
Novi, MI 48377	Mark Tollendsdorf	720.887.5309			720.219.6853			mtollendsdorf@itctransco.com
	Wayne Kenniker	319.585.3632			319.329.1583			wkenniker@itctransco.com
	Rolland Scheels	248.946.3126			517-416-3964			rscheels@itctransco.com
	NOTES: For mutual aid teleconferences, provide the teleconference phone number and access code to ATC system operator. Request the system operator to notify the "MAG on call" employee.							
MADISON GAS & ELECTRIC COMPANY								
133 South Blair	Jim Lorenz	608.252.5645		608.252.5623	608.444.9615	608.825.9703		jlorenz@mge.com
Madison, WI 53703	Richard (Dick) Schwarz	608.252.7191		608.252.1591	608.444.9680	608.825.7267		rschwarz@mge.com
608.252.7111	MGE Dispsatch Office	608.252.7200		608.252.1591				
Fax: 608.252.1591	NOTES: Alt Office # 608.252.7252							
MINNESOTA POWER- ALLETE								
3215 Arrowhead Rd.	Larry Tessier- Mgr Field Ops	218.355.2647			218.590.5919	218.724.6303		ltessier@mnpower.com
Duluth, MN 55811	John Muehlbauer, Supt Line	218.355.2431	2431	218.720.2781	218.390.4898	218.722.4450		jmuehlbauer@mnpower.com
218.722.2641	Chuck Kimball, Mgr, Dist. Resources	218.355.2554			218.590.2854	218.728.6219		ckimball@mnpower.com
Fax # 218.720.2775								
NORTHWESTERN ENERGY								
600 Market	Mike Sydow	605.353.7463		605.353.7519	605.354.2743	605.352.8314		michael.sydow@northwestern.com
Huron, SD 57350	Reed McKee	605.353.7464		605.353.7519	605.354.9010	605.352.0697		reed.mckee@northwestern.com
605.352.8411	Steve Arbach	605.353.7509		605.353.7519	605.354.0141	605.352.6122		steve.arbach@northwestern.com
Fax # 605.353.7519								
OTTER TAIL POWER COMPANY								
215 S. Cascade	Dan Wynn	218.739.8685		218.739.8734	218.770.2480	701.642.1232		dwynn@otpco.com
Fergus Falls, MN 56538-0496	Brad Howland	218.739.8340		218.739.8731	218.770.2470	218.736.5150		bhowland@otpco.com
218.73.8200								
Fax # 218.739.8884								
WE ENERGIES								
PO Box 2046	Jim Charboneau	262.574.6426		262.574.6423	414.588.0603	262.966.0251	262.544.7500 X3459	james.charboneau@we-energies.com
Milwaukee, WI 53201-2046	Glenn Peliska	414.540.5831		414.540.5864	262.993.3012	262.993.3012		glenn.peliska@we-energies.com
414.221.2345	Mike DiGiacomo	262.574.6420		262.574.6423	262.370.7336	262.367.9393	262.544.7500 X3810	mike.digiacomo@we-energies.com
Emergency Control Center # 262.542.1440	Dave Effertz	414.944.5780			414.550.8686		262.544.7500 X8776	dave.effertz@we-energies.com
	Todd Schaffer	262.574.6433			414.550.0002	262.297.1207	262.544.7500 X3770	todd.schaffer@we-energies.com
	John Nesbitt	262.574.6439			262.844.8917	262.968.3290	262.544.7500 X3870	john.nesbitt@we-energies.com

WISCONSIN PUBLIC SERVICE CORPORATION								
700 North Adams Street	Don LuMaye	920.433.1033		920.433.1758	920.680.1549	920.434.6822		drlumaye@wisconsinpublicservice.com
Green Bay, WI 54301	Vern Peterson	920.433.5501		920.433.1758	920.660.4034	920.662.9550		vjpeterson@wisconsinpublicservice.com
800.743.6634	Otto Marquardt	920.433.2995		920.433.1758	920.660.8326	715.535.2798		olmarquardt@wisconsinpublicservice.com
Fax # 920.433.1758								
Emergency Control Center # 800.511.7720	NOTES: For conference calls, email the primary and alternate contact along with the WPS System Operations Center at Tcons5@wisconsinpublicservice.com. They							
	monitor a shared email mailbox 24/7 and will ensure the proper persons are notified.							
XCEL ENERGY- NORTHERN STATES POWER CO.- MINNESOTA								
414 Nicollet Mall	Todd Place	612.630.4126		612.630.4150	612.581.1095	651.777.0366		todd.d.place@xcelenergy.com
Minneapolis, MN 55401-1923	Tim Virant	651.229.5532		651.229.2347	612.437.8873	651.486.3844		tim.j.virant@xcelenergy.com
612.330.5500	Sean Walker	651.229.2360		651.573.9423	612.369.2154	651.793.6753		sean.d.walker@xcelenergy.com
Fax # 612.330.7699	NOTES: The Xcel Energy Operating Companies are Northern State Power Co.							
Emergency Control Center #612.321.7434								
MIDWEST MUTUAL ASSISTANCE								ZONE 1 & 2
Dec-12								
COMPANY	**NAME**	**OFFICE**	**PHONE EXT.**	**FAX**	**CELL**	**HOME**	**PAGER**	**E-MAIL**
AMEREN								
P.O. Box 66149	Mike Gillson	314.554.2196		324.554.6454	618.791.4551	618.466.9650		mgillson@ameren.com
St. Louis, MO 63166-6149	Riley Adams	217.535.5053			217.246.0213	217.585.0619		radams@ameren.com
800.552.7583	Dave Muntean	314.554.3761		314.554.6454	314.315.2061	636.778.0102		dmuntean@ameren.com
Fax # 314.554.6454								
COMED COMPANY								
1700 Spencer Rd.	Bob Plant	815.463.2078			815.263.2243	815.467.9375	888.463.2614	robert.plant@exeloncorp.com
Joliet, IL 60433	Dawn Owens	815.463.2749			630.936.0750	630.936.0750		dawn.owens@exeloncorp.com
815.463.2950	Bob Charland	815.463.2077			815.263.0189	815.741.3562		robert.charland@exeloncorp.com
Emergency Control Center # 816.463.2996	NOTES: Also known as commonwealth Edison							
MID-AMERICAN ENERGY COMPANY								
P.O. Box 657	Terry D. Smith	515.242.3946		515.242.3966	515.210.4566	515.2787.2985		tdsmith@midamerican.com
Des Moines, IA 50303-0657	Tom Anderson	515.252.6955		515.242.3966	515.979.1355	515.251.8303		tmanderson@midamerican.com
515.242.3924	Matt Mitchell	515.242.4012		515.281.2490	515.979.0580	515.720.7577		mmitchell@midamerican.com
Fax # 515.252.6403	Mark Weeks	515.252.6648			525.979.1351	515.967.6280	515.252.9253	msweeks@midamerican.com
NEBRASKA PUBLIC POWER DISTRICT								
P.O. Box 499	Robert G. Ausdemore	402.644.3302			402.649.9333	402.640.4136		rgausde@nppd.com
Columbus, NE 68602-0499	Scott Walz	402.362.7245			402.366.0532	402.362.2814		srwalz@nppd.com
800.379.1037	Paul Brune	402.362.7222		402.362.7255	402.984.0854	402.736.4404		pebrune@nppd.com
Fax # 402.644.3303	NOTES: Include the following in emails- dmjaixe@nppd.com							
NORTHERN INDIANA PUBLIC SERVICE COMPANY								
801 E. 86th Ave.	Dan Piekarski	219.938.7551		219.938.7694	219.742.6900	219.365.3377	www.219742.6900@vtext.com	djpiekarski@nisource.com
Merrillville, IN 46410	Alex Cervantes	219.647.5033		219.647.5402	219.730.9383	219.227.8189		acervantes@nisource.com
219.647.5089								
Fax # 219.647.4777								
Emergency Control Center # 219.647.4846								
OMAHA PUBLIC POWER DISTRICT								
444 S. 16 St. Mall	Tom Larsen	402.552.5230		402.552.5991	402.699.0267	402.614.9439		tplarsen@oppd.com
Omaha, NE 68102	Jerry McCaw	402.552.5312			402.677.1317			gmccaw@oppd.com
402.636.2000	Blain Dinwiddie	402.636.2410			402.510.6603	402.399.8445		bdinwiddie@oppd.com
	Roger Peterson	402.552.4914		402.552.5823	402.618.1601	402.291.0155		rlpeterson@oppd.com
	Line Dispatch	402.552.5681		402.552.5689				
	Rissa Conner- Material/Stores	402.636.3088		402.636.3931	402.490.5346	402.201.0513		rmconner@oppd.com

MIDWEST MUTUAL ASSISTANCE

ZONE 2

Dec-12

COMPANY	NAME	OFFICE	PHONE EXT.	FAX	CELL	HOME	PAGER	E-MAIL
BLACK HILL ENERGY								
105 S. Victoria	David Atwood	719.546.6508			719.252.1449	719.547.1892		david.atwood@blackhillscorp.com
Pueblo, CO 81003	Colennda Fratterelli	719.546.6412			719.248.9445	719.564.0028		colennda.fratterelli@blackhillscorp.com
800.694.8989	Tom Cote	719.546.6423			719.251.2957	719.948.2300		tom.cote@blackhillscorp.com
	NOTES: Formerly WestPlains Energy- Colorado/Formerly Aquila Network- WPC							
DUKE ENERGY								
139 East 4th Street	Marty Zearbaugh	317.838.6378		317.838.6388	317.409.1066	317.837.9952		marty.zearbaugh@duke-energy.com
Cincinnati, OH 46502	Marc Arnold	513.419.1539			513.519.2854	859.485.2227		marc.arnold@duke-energy.com
	Joan Daugherty	812.926.5308			513.310.7024			joan.daugherty@duke-energy.com
	NOTES: Formerly Cinergy							
LG & E AND KU ENERGY LLC								
820 West Broadway	John Wolfe	502.627.4312			502.643.8210			john.wolfe@lge-ku.com
Louisville, KY 40202	Charles Hudson	502.627.3255		502.217.2251	502.643.5561	502.459.5398		charlie.hudson@lge-ku.com
502.627.3401	Shenita Gazaway	502.627.3925		502.217.2579	502.741.4382			shenita.gazaway@lge-ku.com
	Robby Trimble	859.367.5709		502.217.2100	859.576.0045	502.217.2100		robby.trimble@lge-ku.com
INDIANAPOLIS POWER AND LIGHT COMPANY								
1230 West Morris St	Greg Micheel	317.261.5230			317.997.0091	317.293.2302		greg.micheel@aes.com
Indianapolis, IN 46221-1744	Kevin Walker	317.261.8196			317.372.2419	765.482.2690		kevin.walker@aes.com
317.261.8189	Dan Davenport	317.261.5497			317.372.2374	317.849.1655		dan.davenport@aes.com
Fax # 317.630.5709	Mark Irving	317.261.8603			317.370.7033	317.745.4269		mark.irving@aes.com
KCP&L								
P.O. Box 418679	Randy Watson	816.654.1485			816.803.2387	816.884.3283		randy.watson@kcpl.com
Kansas City, MO 64141-9679	Carol Baxter	816.701.0306			816.719.5665			carol.baxter@kcpl.com
816.556.2200	Chris Kurtz	816.245.3889			816.392.4644	816.578.4705		chris.kurtz@kcpl.com
816.654.1287	Duane Anstaett	816.654.1603			816.719.2541	816.781.3294		duane.anstaett@kcpl.com
	Ryan Mulvany	816.654.1208			913.558.2120			ryan.mulvany@kcpl.com
	NOTES: Acquired Aquila Networks, St.Joe Light & Power, Aquila Network and MPS							
MIDWEST ENERGY								
1330 Canterbury Road	Dale Giebler	785.650.2568		785.265.1464	785.623.2087	785.650.1100		dgiebler@mwenergy.com
Hays, KS 67601	Fred Taylor	785.625.1438		785.625.1464	785.443.1957			ftaylor@mwenergy.com
800.222.3121								
Fax # 785.625.1487								
VECTREN ENERGY DELIVERY OF INDIANA								
1 N. Main Street	Chris Claybrooks	812.491.4651			812.568.5231			cclaybrooks@vectren.com
Evansville, IN 47702-0209	Brian Gatewood	812.491.4531			812.568.9870			bgatewood@vectren.com
812.491.4000	Mike Singer	812.491.4627		812.491.4877	812.568.9909	812.867.9000		msinger@vectren.com
Fax # 812.464.4715	NOTES: Previously Southern Indiana Gas & Electric Company							
WESTAR ENERGY								
P.O. Box 889	Jim Tyler	785.575.6383		785.575.8414	785.608.4749	785.865.0064		jim.tyler@westarenergy.com
Topeka, KS 66601	Bryan Nowlin	785.575.6057		785.575.8414	785.633.7450			bryan.nowlin@westarenergy.com
785.575.6300	Natalie Rolfe	316.299.7483		316.299.7520	316.708.5257			natalie.rolfe@westarenergy.com
Fax # 316.299.7520	NOTES: Previously DBA KPL and KGE							
XCEL ENERGY- PUBLIC SERVICE COMPANY OF COLORADO								
1800 Larimer Street	Rodney Hunter	303.571.3711		303.571.3991	303.358.9384	303.699.8089		rodney.hunter@xcelenergy.com
Denver, CO 80202	Richard de Aragon	303.571.3532		303.571.3991	303.909.2163	303.909.2163		richard.c.dearagon@xcelenergy.com
303.571.3927	Teresa Maestas	303.571.3105		303.571.3524	303.888.6189	303.716.0305		teresa.maestas@xcelenergy.com
Fax # 303.571.3991								

MIDWEST MUTUAL ASSISTANCE

ZONE 2 & 3

Dec-12

COMPANY	NAME	OFFICE	PHONE EXT.	FAX	CELL	HOME	PAGER	E-MAIL
AMERICAN ELECTRIC POWER								
1 Riverside Plaza	James D. Nowak (Jim)	614.716.5832		614.716.5954	330.704.5160	614.704.5160		jdnowak@aep.com
Columbus, OH 43215	David O. Callahan (Dave)	614.716.1226		614.716.5954	614.203.0006	614.367.0602		docallahan@aep.com
614.716.1000								
EMPIRE DISTRICT ELECTRIC COMPANY								
P.O. Box 127	Tina Gaines	417.625.6121		417.625.5165	417.850.8002			tgaines@empiredistrict.com
Joplin, MO 64802-0127	Sam McGarrah	417.625.6526			417.850.9460			smcgarrah@empiredistrict.com
417.625.5100	Lance Burbridge	417.334.3176		417.334.3204	417.839.4704			lburbridge@empiredistrict.com
Fax # 417.625.5165								
ENTERGY								
P.O. Box 1640	Mike Fricke	601.985.2750		601.985.2236	225.937.3599	601.605.9840		mfricke@entergy.com
Jackson, MS 39215	David Luthe	501.279.6965		501.279.3107	501.230.2260	501.279.0091		dluthe@entergy.com
601.985.2750	Bill Howell	601.985.2755		601.985.2236	601.955.5201	601.924.1373	601.955.5201	bhowell@entergy.com
Fax # 601.985.2366								
Emergency Control Center # 504.374.4461	NOTES: Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas							
OG & E ELECTRIC SERVICE								
P.O. Box 321	Rick Berg	405.553.8410			405.831.9252	405.285.1993		bergrf@oge.com
Oklahoma City, OK 73101-0321	Gary Rowlett	405.553.8021			405.830.0933	405.399.9222		rowletgw@oge.com
405.553.3000	Mike Mathews	405.553.8351			405.615.0589	405.354.6093		mathewmr@oge.com
Fax # 405.553.3760								
Emergency Control Center # 405.553.8109								

MIDWEST MUTUAL ASSISTANCE

ZONE 3

Dec-12

COMPANY	NAME	OFFICE	PHONE EXT.	FAX	CELL	HOME	PAGER	E-MAIL
CENTERPOINT ENERGY								
P.O. Box 1700	Randy Pryor	713.207.1403		713.207.1402	713.203.1179	281.232.2749		randy.pryor@centerpointenergy.com
Houston, TX 77251	Doug White	713.945.7995		713.945.6663	281.433.6340	281.980.6221		doug.white@centerpointenergy.com
713.207.1111	Thomas Klesel	713.945.4452		713.945.4497	713.569.3715	281.341.1496		thomas.klesel@centerpointenergy.com
Emergency Control Center # 713.207.9849	Ernie Kaster	281.561.3225		281.561.3278	713.545.6865	979.733.0254		ernest.kaster@centerpointenergy.com
	NOTES: Formerly Reliant Energy HL & P							
TEXAS-NEW MEXICO POWER COMPANY								
702 36th St. North	Mike Grider	409.948.8451	4249	409.948.8576	281.386.7665	281.710.8752		mike.grider@tnmp.com
Texas City, TX 77590	Allen Aars	972.420.4189	4105	972.420.7390	817.996.6615	817.441.5663		allen.aars@tnmp.com
407.948.8451	Neal Walker	972.420.4189	4102	972.420.7628	972.571.6304	817.464.0400		neal.walker@tnmp.com
Fax # 409.948.8576								
ONCOR ELECTRIC DELIVERY								
1616 Woodall Rodgers Fwy, Ste. 7B-006	Mike Carter	214.486.3112		214.486.4056	469.261.2500	817.801.1681		mike.carter@oncor.com
Dallas, TX 75202	Joe Bilbo	214.486.3099		214.486.5922	469.261.5574	903.883.9077		jbilbo1@oncor.com
	Jeff Dossey	817.215.5173			469.261.2520	817.303.8218		jeffrey.dossey@oncor.com
XCEL ENERGY- SOUTHWESTERN PUBLIC SERVICE								
600 South Tyler	Joey Zahn	806.796.3242		806.796.3249	806.241.3147			joey.zahn@xcelenergy.com
Amarillo, TX 79118	Julie Dillard	806.796.3271		806.796.3349	806.787.5834			julie.dillard@xcelenergy.com

806.378.2919	Gary Lakey	806.378.2919		806.378.2995	806.679.3325			gary.lakey@xcelenergy.com
Fax # 806.378.2995								

Attachment C

Form No. 6102 Rev. 7/10

Subject: FBG 269 Feeder Lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: FBG 269

Date Out:	3/8/12	Date In:	3/8/12
Time Out:	5:37 pm	Time In:	9:02 pm

Duration: 3hrs 25 min

Number of Customers Affected: 561

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected:

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: Pine River - Hackensack feeder locked open Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: BLS-509

Date Out:	04/15/2012	Date In:	4/15/2012
Time Out:	17:28	Time In:	18:44

Duration: 74 min

Number of Customers Affected: 1120

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Pine River - Hackensack

Major Customers:

Cause: Large jack pine came down on line.

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: TWN-2, TWN-1 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: TWN-2, TWN-1

Date Out:	04/16/2012	Date In:	04/16/2012
Time Out:	02:28	Time In:	07:28

Duration: 5:00

Number of Customers Affected: 846

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Tower

Major Customers:

Cause: 3 high side fuses blown at Tower substation

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: Mot 1 feeder lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: Mot 1

Date Out:	4/16/12	Date In:	4/16/12
Time Out:	3:06 am	Time In:	4:41 am

Duration: 1 hr, 35 minutes

Number of Customers Affected: 864

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected:

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: Blanchard 524 Feeder Lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: BLD-524

Date Out:	04/21/2012	Date In:	04/21/2012
Time Out:	10:54	Time In:	12:02

Duration: 68mins

Number of Customers Affected: 769

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Upsala, CPA Sobieski

Major Customers: 0

Cause: Birds building nest on 524 feeder line, sticks were hanging on line.

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: BAR-6421, DEN-6431 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: BAR-6421, DEN-6431

Date Out:	04/28/2012	Date In:	04/28/2012
Time Out:	03:58	Time In:	05:32

Duration: 1:34

Number of Customers Affected: 1944

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Willow River, Sturgeon Lake, Moose Lake, Barnum

Major Customers:

Cause: Tree came down on a main distribution line

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: FIF 234 feeder lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: FIF 234

Date Out:	4/30/12	Date In:	4/30/12
Time Out:	9:10 am	Time In:	10:17 am

Duration: 1hr, 7 minutes

Number of Customers Affected: 573

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Duluth

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: Crosby Tie Switch 505-504 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: RVT- 506

Date Out:	05/12/2012	Date In:	05/12/2012
Time Out:	2:22AM	Time In:	3:44AM

Duration: 1hr 22 mins

Number of Customers Affected: 1680

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Riverton, Ironton, Crosby

Major Customers: 0

Cause: Vehicle accident took down pole on corner of Curtis Ave & 4th Street in Ironton.

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: Babbitt Feeder 1 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: BAB 1

Date Out:	05/17/2012	Date In:	05/17/2012
Time Out:	01:36pm	Time In:	03:06pm

Duration: 1hr 36mins

Number of Customers Affected: 744

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Babbitt

Major Customers: 0

Cause: High winds, vegetation.

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: MDY -277 feeder Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: mdy-277

Date Out:	5/27/2012	Date In:	5/27/2012
Time Out:	9:31 PM	Time In:	11:37 PM

Duration: 2hrs 6minutes

Number of Customers Affected: 971

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Esko, Proctor, Hermantown

Major Customers:

Cause: Pine Tree took down primary

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: SEB-1, HBB-515 FEEDERS Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: SEB-1, HBB-515

Date Out:	6/11/12	Date In:	6/11/12
Time Out:	15:17	Time In:	17:18

Duration: 121 minutes

Number of Customers Affected: 672

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Sebeka, Nimrod

Major Customers: None

Cause: Tree on primary caused trip at substation

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: Feeder Lockout RVT-505 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: RVT-505

Date Out:	6/17	Date In:	6/17
Time Out:	22:14	Time In:	23:41

Duration: 1:27

Number of Customers Affected: 1680

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Crosby\Ironton

Major Customers:

Cause: large branch on RVT-505 feeder line at 317 Irene Ave. area

Follow-Up: none

Form No. 6102 Rev. 7/10

Subject: 23 Line Lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: Ker 6501; Ask 6521

Date Out:	6/20/2012	Date In:	6/21/2012
Time Out:	10:50 PM	Time In:	12:03 AM

Duration: 1hr, 13 minutes

Number of Customers Affected: 714

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Askov, Kerrick, Bruno

Major Customers:

Cause: Thomson Hydro Flooding

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: BLS 509 feeder lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: BLS 509

Date Out:	7/2/12	Date In:	7/2/12
Time Out:	7:15 pm	Time In:	8:55 pm

Duration: 1 hr, 40 minutes

Number of Customers Affected: 1149

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Pine River, Hackensack

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: 277 Feeder Lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: MDY-277

Date Out:	7/2/2012	Date In:	7/2/2012
Time Out:	03:07 AM	Time In:	04:50

Duration: 1hr 43 minutes

Number of Customers Affected: 971

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Esko, Proctor, Midway Township

Major Customers:

Cause: Bad UG cable

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: AKY 543 feeder lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: AKY 543

Date Out:	7/2/12	Date In:	7/2/12
Time Out:	7:21 pm	Time In:	8:21 pm

Duration: 1 hr

Number of Customers Affected: 1804

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected:

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: PQT 531 feeder lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: PQT 531

Date Out:	7/3/12	Date In:	7/3/12
Time Out:	5:25 pm	Time In:	6:35 pm

Duration: 1 hr, 10 minutes

Number of Customers Affected: 642

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected:

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: Feeder Lockout FIF-220 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: FIF-220

Date Out:	07/03/2012	Date In:	07/03/2012
Time Out:	21:55	Time In:	23:52

Duration: 1 hour and 57 min.

Number of Customers Affected: 3098

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Duluth

Major Customers: Arrowhead House West Inc, Just Take Action Inc., Yellow Cab Co.

Cause: unknown at this time

Follow-Up: 22:48
220-256 Tie Swtich closed, by Bergren. 220 feeder in service between 220-256 Tie Switch, 220-
230 Tie 9th Ave E, 220-252 Tie Switch & 1st Ave E 88.

23:05
220F at 15TH AVE WEST 115 closed (1)
220 feeder in service between 15th Avenue West 115kV Sub, 3rd Ave W 88, 220-230 Tie Switch,
234-254 Tie Switch, 220-235 Tie Switch & TV auto switches.

23:52
3rd Ave W 88 in 220 feeder closed, by Bergren.

(220 feeder in service between 3rd Ave W 88, 2nd Ave E Riser 44 & 1st Ave E 88)

Form No. 6102 Rev. 7/10

Subject: ASK-6521, KER-6501, #23 Transmission Line Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: ASK-6521, KER-6501

Date Out:	07/05/2012	Date In:	07/05/2012
Time Out:	12:14 AM	Time In:	3:48 AM

Duration: 3:34

Number of Customers Affected: 690

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Askov, Bruno, Kerrick

Major Customers:

Cause: Unknown

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: BLS 509 feeder lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: BLS 509

Date Out:	7/6/12	Date In:	7/6/12
Time Out:	10:00 am	Time In:	8:00 pm

Duration: 10 hrs

Number of Customers Affected: 511

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected:

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: BAC 1 feeder lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: BAC 1

Date Out:	7/6/12	Date In:	7/6/12
Time Out:	10:14 am	Time In:	12:05 pm

Duration: 1 hr, 51 minutes

Number of Customers Affected: 634

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected:

Major Customers:

Cause:

Follow-Up: Correction: Documentation created after reliability engineer determined feeder locked out.

Form No. 6102 Rev. 7/10

Subject: 7-8-12 MOT-1, DOG-503 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: MOT-1, DOG-503

Date Out:	7-8-12	Date In:	7-8-12
Time Out:	19:26	Time In:	21:02

Duration: 1hr, 36min

Number of Customers Affected: 553

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Motley

Major Customers: Trident Seafood

Cause: Unknown

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: 7/26/12 23 Line Outage Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: Ker 6501, ASK 6521

Date Out:	7/26/12	Date In:	7/26/12
Time Out:	7:10PM	Time In:	8:59 PM

Duration: 1 hour, 49 minutes

Number of Customers Affected: 714

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Bruno, Askov, Kerrick

Major Customers:

Cause: Tree on 23 line in Askov, removed and reenergized line

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: 8/4/12 FIF-620 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: FIF-260

Date Out:	8/4/12	Date In:	8/4/12
Time Out:	00:43	Time In:	02:37

Duration: 1hr, 54min

Number of Customers Affected: 770

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Downtown Duluth

Major Customers:

Cause: Weather/Lightning

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: MDY 277, LSP 223 Lockout Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: MDY 277; LSP 223

Date Out:	8/6/12	Date In:	8/7/12
Time Out:	6:30 PM	Time In:	02:50

Duration: 8hrs, 20 minutes

Number of Customers Affected: 2108

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Esko, Hermantown, Proctor

Major Customers:

Cause: Bad UG cable

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: MDY-278 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: MDY-278

Date Out:	08/10/2012	Date In:	08/10/2012
Time Out:	2:17 AM	Time In:	4:50 AM

Duration:

Number of Customers Affected: 597

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Hermantown, Cloquet, Duluth

Major Customers:

Cause: Bad primary underground electrical cable

Follow-Up:

Form No. 6102 Rev. 7/10

Subject: ASK-6521 and KER-6501 Outage Notice: Final Notice

Distribution System Status Outage Notification

Feeder/Bus #: ASK-6521 and KER-6501, #23 Transmission Line

Date Out:	11/24/2012	Date In:	11/24/2012
Time Out:	03:16 AM	Time In:	8:05 AM

Duration: 4hrs, 49 minutes

Number of Customers Affected: 714

For information about this alert, contact: Stefanie Hayes
218-720-2764
Stefanie Hayes@mnpower.com

For follow-up information or questions, contact: Stefanie Hayes, OCC

Communities Affected: Askov, Kerrick, Bruno

Major Customers:

Cause: Trees took down primary wire; Two bad insulators found

Follow-Up:

STATE OF MINNESOTA	)	AFFIDAVIT OF SERVICE VIA
	) ss	ELECTRONIC FILING
COUNTY OF HENNEPIN	)	

Roshelle Herstein of the City of Crystal, County of Hennepin, State of Minnesota, says that on the 1st day of April, 2013, she served Minnesota Power's 2013 Safety, Reliability and Service Quality Standards Report to the Minnesota Public Utilities Commission and the Minnesota Department of Commerce via electronic filing.

/s/ Roshelle Herstein

Subscribed and sworn to before
me this 1st day of April, 2013.

/s/ Jill N. Yeaman

Notary Public - Minnesota
My Commission Expires January 31, 2016

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
Allen	Krug	N/A	xcel	414 Nicollet Mall-7th fl Mpls, MN 55401	Paper Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
Ron	Spangler, Jr.	rlspangler@otpco.com	Otter Tail Power Company	215 So. Cascade St. PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst
SaGonna	Thompson	Regulatory.Records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	GEN_SL_Minnesota Power_MP's SRSQ Serv Lst